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ABSTRACT

Experiences with various modern management techniques and practices in selected small, private church-related colleges were studied. For comparative purposes, practices in public colleges and universities were also assessed. Management techniques used in small companies were identified through review of the literature and the management seminars and programs of organizations that assist higher education institutions in management tasks. The State of Tennessee was selected as a typical state, and a checklist based on selected management techniques was sent to the chief fiscal officer in its 83 degree-granting colleges and universities. Respondents were asked to indicate which techniques were actually in use in their institution and to describe other management techniques and practices that have been successful. Three of the institutions were visited to determine the impact of the use of the management practices. Responses indicated the importance of management information systems for budgeting, accounting, or planning purposes. Formal institutional development plans and established channels for receiving feedback on college operations from the college constituency were also ranked high by respondents. In some cases, responses and explanations indicated a clear lack of comprehension of the management practices included on the checklist. Problems in small, private church-related colleges and possible solutions are considered. In addition to the literature review, the following are included: a sample questionnaire: references: a chart of systems suitable for use in small colleges: a list of organizations concerned with higher educational management: and form A (for the employee) of the Annual Management Audit (Ferguson). (SW)

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A STUDY OF THE APPLICABILITY OF SCIENTIFIC MANAGEMENT TECHNIQUES FOR THE ADMINISTRATION OF SMALL, PRIVATE CHURCH-RELATED COLLEGES

By

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B.Sc., University of Detroit

M.B.A., State University of New York, Albany, 1975

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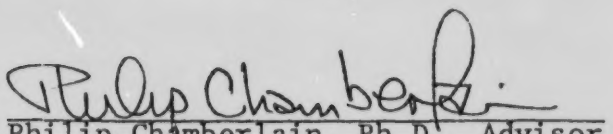

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The purpose of this research study was to report on the extent of management's use of and experience with various modern management techniques and practices in selected small, private church-related colleges. Several management techniques and practices finding profitable use in the managing of small business organizations and higher educational institutions were identified, using not only literature review and studies, but reviewing the content of management seminars and the programs of various organizations devoted to producing and applying techniques to assist in managing higher education institutions. The State of Tennessee was regarded as a "typical state" and a listing was made of all eighty-three degree-granting, higher education institutions. A checklist was constructed with those management techniques selected and sent to the chief fiscal officer in each of these Tennessee institutions.

By also viewing the extent of the use and experiences with these management practices in selected public colleges and universities, the study could also assess the applicability of the management tools to assist in managing small, private church-related colleges. Certain responses viewed as representing exemplar colleges were selected and those colleges were visited.

The sum total of all of the aspects of the study led to the development of nine pitfalls in managing the small,

private church-related college, along with brief suggestions as to what could be done about each of these pitfalls through the application of various appropriate scientific management techniques, found to be in use in some of the Tennessee colleges and universities. These appear in the study's conclusion.

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CHAPTER 1

INTRODUCTION

With projections of decreasing college enrollments for the 1980s, many of the people who administer colleges have started to become management-conscious in attempts to combat or avoid the crisis faced by many other colleges, particularly the small colleges.[1] Inflation and other economic forces are continuing to dry up many appropriation and contribution sources, and market shares continue to be wrested away from many. Thus, many college presidents have recognized the need to develop managers within their college and themselves become more management-oriented. Nevertheless, it appears that useful management techniques, such as many of those employed in business (and particularly small businesses) have not found widespread use in either large or small colleges.

Garland Parker, Executive Director of the Office of Enrollment Policy and Educational Research at the University of Cincinnati, and the author of the ACT Annual National College Enrollment Reports (which have been published for fifty-nine years), may well have summed up the plight of the small, private church-related college:

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[1]U.S., Department of Health, Education and Welfare, National Center for Education Statistics, Statistics to 1986-87 (Washington, D.C.: Government Printing Office, 1978), pp. 20-25.

> If so-called crisis management in higher education seemed to be the normal mode in the 1960s and 1970s, near disaster management may be the challenge in the next decade or so.[1]

In viewing the difficulties facing college management, Bowen and Minter wrote:

> One major question . . . (is) whether, in the struggle for survival, the basic integrity of private colleges and universities is threatened. With the growing intensity of competition for students and funds, are they being forced to respond to market forces in ways that impair their distinctiveness, their academic excellence, their concern for human scale and individual personality, their commitment to liberal learning, their role as a sanctuary of academic freedom, their position as standard setters?[2]

Even with the present awareness of the stated factors above, it appears that on the whole, management techniques employed by small businesses have not been widely utilized where appropriate, to assist in the task of managing colleges such as the small, private church-related college. Many such colleges still do not appear to be operated using modern and scientific management techniques and practices.

The Problem

There were enough forces working against the small, private church-related colleges that many were not expected to survive the decade of the 1980s without themselves becoming

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[1] Garland G. Parker, Collegiate Enrollments in the U.S. 1978-79: Statistics, Interpretations, and Trends in Four-Year and Related Institutions, ACT Special Report 23 (Iowa City: American College Testing Program, 1978), p. 18.

[2] Howard Bowen and W. John Minter, Private Higher Education (Washington, D.C.: Association of American Colleges, 1975), p. 79.

energetically involved in the task of improving their management expertise.

More studies were needed that would demonstrate how these colleges could be able to better adapt in order to face an uncertain future. With these studies, many such colleges could avoid a management process that was haphazard, stimulus response-styled, or crisis-management in nature.

Background

For colleges, it was expected that the environment of the 1980s would be characterizied by factors such as scarce resources, multifarious demands from society and various other constraints. This suggested that administrators in small, private church-related colleges should become increasingly management-oriented, since the process of management helped colleges to achieve their goals through more effective operations. In 1959, Harold W. Stoke wrote of the college chief executive and leader:

> The college President as a Man of Learning has been giving way to the Man of Managing, even though the change has not taken place without strain and conflict.[1]

In 1979, twenty years later, it appeared that this process was still taking place. Top and middle college management still appeared to be lacking in terms of their sophistication as managers in their colleges and universities.

In studying responses from 760 college and university presidents some ten years ago, Michael R. Ferrari profiled

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[1]Harold W. Stoke, The American College President (New York: Harper and Row, 1959), p. 2.

the president of the church-related liberal arts college as a man who generally moved directly into the presidency from church pastorates or from a teaching position (or administrative) in another private liberal arts college. For those who were ministers, the college presidency offered an opportunity for an enlarged and extended ministry. However, many never had full-time educational administrative experience prior to assuming the presidency.[1] Perhaps unsophisticated management procedures resulted from college managers who have been unable to properly perform the required tasks.

The Danforth Commission report served to support the fact that there was indeed a problem of unsophisticated college management among church-sponsored higher education institutions in America. This report in 1966 identified 817 church-related colleges and studied them. Of this group, it was found that a reasonable estimate of at least one third of the entire group was "marginal." Another one third was in the broad middle range of quality.[2] The Catholic-related (sponsored) colleges, in particular, lagged in their adoption of modern tools of management.[3] Church-sponsored college management was seen as wasting their assets and increasing in

---

[1]Michael R. Ferrari, Profiles of American College Presidents (Lansing: Michigan State University Press, 1970), pp. 25-30.

[2]The Danforth Commission, Report on Church-Sponsored Higher Education in the U.S.A., by Manning M. Pattillo, Jr., and Donald M. MacKenzie (Washington, D.C.: American Council on Education, 1966), p. 101.

[7]Ibid., p. 203.

their weaknesses by imitating educational patterns laid down by others, and performing such imitations in ways that ill-served their purposes. Many were still operating on outdated, time-honored, rigid, and doctrinaire college administration principles.[1]

The above discussion pointed out that in 1959, a management problem was reported within small, private church-related colleges. In 1966, some seven years later, the Danforth Commission reported that the problem still existed. In 1980, it appears that the problem is still present.

Increased attention needs to be given to managing the small, private church-related college in the 1980s, a time of crisis.

The Study

The purpose of this research study was to report on the extent of management's use of and experience with various modern management techniques and practices in selected small, private church-related colleges. Also, by viewing the extent of the use and experience with these management practices in selected public colleges and universities, the study could also assess the applicability of the management tools to assist in managing small, private church-related colleges.

The study had four basic phases:

1. Phase One identified through the reviewing of literature and the content of various management seminars, several management techniques and practices which are finding

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[1]Ibid., pp. 200-02.

use in the managing of small companies (or profit-making business organizations)

2. Phase Two identified the population of all degree-granting higher education institutions in the State of Tennessee, and by using the methodology of a checklist, submitted a listing of selected management techniques and practices to each one, requesting the institution to indicate which techniques and practices were actually in use in their institution; and allowed the respondents in the institutions to identify and describe other management techniques and practices being successfully used in their institutions

3. Phase Three chose a very small sample of those respondents and through action research methodology, visited those respondents in order to determine, through discussions with the respondents, their evaluation of the impact of the use of these techniques and practices on their institutions. The number of institutions chosen was guided by the nature of the responses. Institutions visited were those that indicated use of a range of management techniques and practices

4. Phase Four interpreted the results from the checklists returned and personal interviewing at selected colleges with a view toward discovering not only the frequency of use of management techniques, but also the effects of these scientific management techniques as they found use in certain college settings

Assumptions

1. Top level administrators in small, private colleges which are church-related were committed to the continuous

improvement in the validity of their institutions

2. Management concepts as practiced in the business world, properly and knowledgeably applied and with adaptations where necessary, allowed administrators to strengthen all phases of their institutions

Significance of the Study

This study was significant as the results added to a small pool of information from which top- and middle-level administrators in small, private church-related colleges could draw in order to improve their institutions. Handbooks for college administrators exist, but a handbook of college administration, developed and directed to address the needs and environments of the small, private church-related colleges could not be found.

This study was directed to the small, private church-related college in an attempt to begin to bridge the gap between existing management practices and the sources of other management practices that are potentially useful to the small, private church-related college.

Scope and Limitations

This study was limited to the process of managing the college. Academic affairs, student affairs, auxiliary enterprises, and financial administration were not addressed.

Design of the Study

The study followed these procedures:

1. In order to select the management techniques and

practices that were tested for their use in Tennessee colleges and universities, several literature sources and agencies were investigated:

a. The Educational Resources Information Center (ERIC) data base was searched for all studies relating to using management techniques in higher education

b. The Current Index to Journals in Education (CIJE) was searched for journal articles referring to the above subject

c. The publications and available research studies of the National Center for Higher Educational Management Systems (NCHEMS) and the Council for the Advancement of Small Colleges (CASC) were searched for appropriate material

d. The National Association of College and University Business Officers (NACUBO) handbooks were searched for management practices in colleges

e. The 1979 publications list of the American Council of Education was searched. The Management Development and Training Program for Colleges and Universities, sponsored by the American Council on Education, Higher Education Management Institute, was investigated at one of the University of Tennessee Program Centers located in Knoxville

f. A wide range of Business Administration texts and reference books published was reviewed in order to select various management techniques and practices

g. The 1979 American Management Association (AMA) course catalog, the Management Development Guide, and also the catalog of AMACOM books and the AMA Extension Institute Catalog were viewed in order to obtain a cross-section of those management techniques and practices largely in use as determined by seminar contents

h. The Advanced College Management Workshop, sponsored by the Snowmass Institute for Advanced Management Studies in January 1980, was one of the management workshops attended

2. The list of all the degree-granting higher education institutions in Tennessee was obtained from the 1979-80 Institutional Directory of Higher Education in Tennessee. Tennessee universities were studied because of the wide range of universities in the state. As such, the State of Tennessee was regarded as a "typical state" and the findings among its universities and colleges were considered as valid generalizations. The breakdown was as follows:

Public Universities (Each UT campus counted)	22
Public Technical Institutes	4
Private Institutions	32
Private Junior Colleges	5
Private Professional Schools	1
Other Colleges Authorized to Operate by the Commission	10
Private Vocational and Trade Schools	9
TOTAL DEGREE-GRANTING HIGHER EDUCATION INSTITUTIONS IN TENNESSEE	83[1]

A roster was then made with the following format:

Institution	Control	1979-80 Head Count

3. From the list obtained in Item 1, a shortened list was made, consisting of approximately twenty management techniques and practices. Criteria for inclusion in the shortened list were popularity of use in institutions and popularity in the literature

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[1]1979-80 Institutional Directory of Higher Education in Tennessee (Nashville: Tennessee Higher Education Commission, 1979), p. 17.

4. A checklist was constructed using the items contained in Item 3. The names of the chief fiscal officers were obtained from the institutional directory. The checklist was mailed to the chief fiscal officer, asking him to respond by simply checking a box if a particular practice was actually in use in his institution. A space was left for the respondent to describe any adaption to a particular item which was in use, but checked in the negative. A space was left for the respondent to describe and list other practices in use that came to mind, but which did not appear on the checklist. The chief fiscal officer was used because of the high likelihood of his being very familiar with most, if not all, phases of the college's management operations

5. The questionnaire was then mailed. Those not responding in two weeks received a second questionnaire. Those not responding in another two weeks received a third questionnaire

6. Three of the respondents showing a wide use of techniques, or contributing valuable items, were visited. Attempts were made to include both private and public colleges in this visiting, but the latter was guided by the responses. Discussions during visitations were with the users, as much as permitted, in order to get a first-hand sensitivity of the effectiveness and shortcomings of the practices. Sufficient time was spent in order to reasonably understand the overall impact of the use of a particular management practice or technique

7. The results were tabulated with a view toward obtaining frequency of use and non-use of items and utilizing new information contributed by respondents. Responses were broken down by institution type. The responses from institutions that identified themselves as "private, church-related" were further broken down according to institution size, as determined by the 1979-80 enrollment figures given in the Directory of Higher Education in Tennessee.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The purpose of the literature review was to obtain an assortment of management techniques and practices, from which a selection of the more popular and important ones would be made. It was this selected listing that was used to develop the "checklist" that was circulated to all degree-granting, higher education institutions in the State of Tennessee. Studies directly addressing the task of managing the small, private church-related colleges could not be found. Therefore, it became necessary to review the literature using broadened descriptors. The literature review was the result of the following:

1. Reviewing the nature of the public and private sector-based research studies and literature, and also the literature and publications of public and private sector-based agencies dealing with the task of utilizing modern management methods in the managing of types of colleges similar to the small, private church-related college

2. Reviewing the practice of management in small companies in the private sector, obtaining and describing several management techniques and practices which were finding wide use in small companies, but also were applicable to the

management of the small, private church-related college

This literature review did not provide a detailed explanation of all of the techniques and practices selected for the checklist. Since some of the latter are very familiar to today's college administrator, an extended explanation was deemed unnecessary.

Before proceeding further, it is helpful to succinctly review the consensus of a functional definition of management as applicable to a business organization--both profit-making and non-profit organizations. Many functions have been attributed to the process of management, but the classic categorization of management functions was given by Gulick in 1937.[1] It included planning, organizing, staffing, directing, coordinating, reporting, and budgeting. Table 1 shows a grid of nine major authors in management according to the way they classified the major functions of management.[2] Morgan felt that the importance of various functions varied at different levels of management.[3] Therefore, the definition in this study included six consensus functions: planning, organizing, staffing, leading, evaluating, and developing. All these functions represent parts of a large system, and

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[1]Luther Gulick, "Notes on the Theory of Organization," Papers on the Science of Administration, ed. Luther Gulick and L. Urwick (New York: Institute of Public Administration, 1937), p. 13.

[2]David I. Cleland and William R. King, Management: A Systems Approach (New York: McGraw-Hill, 1972), p. 118.

[3]James E. Morgan, Principles of Administration and Supervision (Englewood Cliffs, N.J.: Prentice-Hall, 1973), pp. 8-9.

TABLE 1

MAJOR MANAGEMENT [redacted]IONS AS SEEN BY AUTHORS IN THE LAST 2 DECADES	Planning	Organizing	Control-Controlling	Communication-Communicating	Actuating	Directing-Direction	Staffing	Innovation	Representation	Creating	Motivating	Directing and Marketing
Johnson et al.[1]	X	X	X	X								
Terry[2]	X	X	X		X							
Juclus and Schlender[3]	X	X	X			X						
Davis[4]	X	X	X									
Dale[5]	X	X	X			X	X	X	X			
Koontz and O'Donnell[6]	X	X	X			X	X					
Haimann[7]	X	X	X			X	X					
Hicks[8]	X	X	X	X						X	X	
Longenecker[9]	X	X	X									X
Morgan[10]	X	X	X			X	X					

[1]R.A. Johnson et al., The Theory & Management of Systems (New York:McGraw-Hill, 1967).

[2]G.R. Terry, Principles of Management (Homewood: Richard D. Irwin, 1964).

[3]M.J. Jucius & W.E. Schlender, Elements of Managerial Action (Homewood: Richard D. Irwin, 1960).

[4]R.D. Davis, The Fundamentals of Top Management (New York: Harper & Row, 1951).

[5]E. Dale, Management: Theory & Practice (New York: McGraw-Hill, 1965).

[6]H.D. Koontz & C. O'Donnell, Essentials of Management 2nd Ed. (New York: McGraw-Hill, 1978).

[7]T. Haimann, Professional Management: Theories & Practices (Boston: Houghton Mifflin, 1962); T. Haimann & W. Scott, Management in the Modern Organization (Boston: Houghton Mifflin, 1974).

[8]H.G. Hicks, The Management of Organizations (New York: McGraw-Hill, 1967).

[9]J. Longenecker, Principles of Management & Organizational Behavior (Columbus: Charles Merrill, 1964).

[10]J.E. Morgan, Principles of Administration & Supervision (Englewood Cliffs: Prentice Hall, 1973).

all are equally important to the effectiveness of the organization.

Dykes viewed the functions of educational administration as leadership, planning, staffing, budgeting, coordination, communication, and evaluation.[1] These functions, according to Dykes, have value in that they allow administrators to more clearly view the real dimensions of the administrative role, thus encouraging administrators to give the necessary attention to all of the parameters.

Leadership involves keeping the organization functioning and operating with some degree of rationality and efficiency, and establishing the organizational goals and objectives and moving the organization toward them.

Planning involves the process of systematically developing and charting the long-range development of an institution. Responsibility for planning should be specifically assigned to some staff members or some office with the understanding that it is high priority. All segments of the campus community should be involved in the planning. Plans should be based on accurate data and should be dynamic, such that it is constantly updated.

No college or university is better than the people who constitute its faculty and staff. Staffing and staff development and staff evaluation in the long run determine the success or failure of the institution.

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[1]Archie R. Dykes, College Administration, Concepts and Techniques, ERIC Document ED115 188 (Washington, D.C.: n.p., 1976), p. 7.

Budgeting is a primary instrument of fiscal control; moreover, it is a mechanism for achieving the goals and purposes of the institution. Wide participation in the budget-making process guarantees greater understanding in general and more support of the decisions reached regarding allocation of funds.

Coordination helps to ascertain that the college meets its primary goal of securing maximum application of human resources toward the achievement of organizational goals.

Communication, as long as it is effective, is essential to any organization, and organization influence leaders should seek to include informal communication structures and activities in their overall communication system.

Evaluation entails continuously and comprehensively reviewing all aspects of the college's programs. Evaluation is important since it represents an assessment of progress toward institutional goals and a general review of the institution itself.

A review of the literature dealing with scientific management practices in use in colleges and universities, a review of the literature on management techniques in small companies, a review of other public and private sector-based research studies, and a review of programs of various management development and training agencies led to the selection of the eleven management techniques below. They are discussed in the following literature review:

1. Small college information systems
2. Management systems review
3. In-house management development and training programs
4. Linear management responsibility guide
5. Institutional idea labs
6. Management audits to determine management's orientation to various major human relations concepts in organizations
7. MBO (management by objective)
8. Cost analysis systems
9. Management of marketing (overall institutional marketing through marketing management)
10. Team building (planning to accomplish team objectives)
11. Motivation systems and productivity consciousness

Small College Information Systems

> The study of information systems . . . is not the study of computers. It is the study of how the organization communicates and processes information to maximize the effectiveness . . . and further the objectives of management.[1]

Over the past few years, the services provided by information systems have been much in demand. College administrators expect information that is precise, accurate for recordkeeping as well as for decision making. Information has become increasingly important to the managers of higher

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[1]Frederic G. Withington, The Use of Computers in Business Organizations (Reading, Mass.: Addison-Wesley, 1966), p. 3.

education. It is needed for daily operations, for control and planning at all levels, and for institutional development. Therefore, the following statement carries an enormous degree of significance:

> Information is power. It can be used or abused. Also, information can be good--accurate, timely, and relevant--or it can be bad--inaccurate, late, and irrelevant. But information systems can be developed to generate information that is good and useful to management in higher education.[1]

A system is an array of components designed to accomplish a certain objective according to a plan. A system in the context of management information systems (MIS) is a grouping of men and machines in order to perform specific tasks.

A model is an abstracted, simplified, but controllable expression of complex real-world relationships. Typically, management models start out purely descriptive in nature and graphic or verbal in format.

A systems approach to college administration and planning offers invaluable assistance to the small college because of the way it assists in making better resource-allocation decisions in these small colleges. An unsystematic approach to decision making and institutional planning has been a tradition in many small colleges. The systems used are based on tradition rather than effectiveness, efficiency, and productivity. Designing and implementing systems approaches in large universities has been pursued with success. However,

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[1]Management Information Systems for Higher Education: Studies in Institutional Management in Higher Education, ERIC Document ED152 214 (Washington, D.C.: n.p., 1978), p. 4.

large universities are greatly outnumbered by small colleges; while the latter are not as complex, they present on a smaller scale the same management and control problems and challenges.

The idea of the systems approach and almost all of the tools, techniques, systems models, programs, and services are relatively new and some among them even less than a decade old. Since 1968, many institutions, commercial organizations, and government organizations have given some attention to the development of systems models for institutions of higher education. The following are examples of some of these systems approaches that are suitable for use in small colleges:

1. Management Information Systems for Operations emphasize data collection, data maintenance, and data usage for daily transactions, execution, and control; examples are alumni records and student grades

2. Management Information Systems for Planning emphasize satisfying the need for long-range planning; examples are resource allocation or cost of programs

3. Simulation permits computer simulation of the interrelationship of quantifiable factors

4. Procedural (Process) Models use PERT-like techniques to organize and structure the flow or process of decision making and planning

5. Comprehensive (Tailored) Approach permits the solving of the diagnosed institutional needs through the program of the National Laboratory for Higher Education

6. Exchange Service permits the institution to draw from a clearinghouse (The College and University Systems Exchange) in order to locate systems applications to suit their needs

Table 2 shows sixteen systems models, programs, and services suitable for use in small colleges. Not included among the sixteen systems, but also of interest and usefulness is the six-part Management Organization Systems Technique (MOST) Series, particularly the modeling of the Information System, the Planning Function System, and the Staff Development System.

Management Systems Review

With any type of system comes the task of reviewing with a view toward improving it. Management systems review is usually done "informally," especially in small colleges. The process referenced here dealt with the formal design and implementation of improved management systems for small colleges, describing exactly how to review the structure of a management system. It defined the specific data that should be collected, the procedures that should be followed, and the areas of college management structures that need improvement, as well as evaluated changes after they had been implemented. The methods consisted of three steps:

1. Description of process outputs, procedures, and inputs

2. Evaluation of effectiveness, needs, and priorities for change in the process

TABLE 2

CATEGORIZED SYSTEMS, MODELS, PROGRAMS, AND SERVICES SUITABLE FOR USE IN SMALL COLLEGES

CATEGORY	SYSTEM	NAME	DEVELOPER	REMARKS
Management Information Systems for Operation	INFO/OASIS	Information Network for Operations/Outline Administrative Information System	Sanford Univ. Sanford, CA	Built from an aggregate of files from various university offices--available to all from copious terminals; operable by non-technical personnel.
	TOTAL	TOTAL--The Data Based Management System	Cincom Systems, Inc., Cincinnati, OH	Not on-line, but program interrelates information from all programmed files to aid in college decision making.
	AIDS	Administrative Information Distribution System	Portland St. Univ. Portland, OR	Non-computer data base information system facilitates the distribution of useful information. Operable by clerical staff.
	MARK IV	MARK IV File Management Systems	Informatics, Inc. Canogalark, CA	Not a structure for data collection and maintenance but a computer program for using, maintaining, and developing current data files.
Management Information Systems for Planning	PMS/RRPM	Planning in Management Systems/Resource Requirements Prediction Model	National Center for Higher Educ. Management Systems (NACHEMS) Boulder, CO	An elaborate computer program producing data relevant to cost-analysis and planning or colleges and university and other educational systems. Mainly used now in large universities. It requires an existing computer information data base.
	CAMPUS	Comprehensive Analytical Methods for Planning in Univ. Systems	Systems Research Group Toronto, CANADA	A data base, planning, information system, NCHEMS compatible. It has in addition a computer simulation function.
	RAS	Resource Allocation Study	Princetown Univ. Princetown, NJ	Long-range and annual budgets developed. Budget requests and budget allocations are analysis for analysis comparison and consequences.
Simulation Systems	CAP:SC	Computer Assisted Planning for Small Colleges	Peat, Marwich, Mitchell, & Co. New York, NY	Its data base allows the exploring of the results and implications of alternate policy decisions or changes in the environment. It was actually designed for small college use.

TABLE 2--Continued

CATEGORY	SYSTEM	NAME	DEVELOPER	REMARKS
	HELP/PLANTRAN	Higher Educ. Long-Range Planning/Planning Translator	Midwest Research Institute Kansas City, MO	With a consultant-type data base in the computer, imput of possible college actions will be viewed against the logical consequences (1 to 10 years) of the assumptions, factor and stated variable fed in.
	CEM	Cost Estimation Model	NACHEMS Boulder, CO	A simulation tool for management
	TEMPLAN	Temple Planning System	Temple Univ. Philadelphia,PA	Simulates annual incremental effects of trends of hypothesized ("what if") conditions and policies.
	CSM/RIM	Cost Simulation Model/ Reduced Imput Model	Univ. of Miami Coral Gabels, FL	This model brings together all variables that could impact income and expenditures and studies their inter-relationships. From the enrollment data on class cards, all types of relationships and analysis could be drawn.
Procedural (Process) Models	PBA	Planning, Budgeting, & Accounting	NACUBO Washington,D.C.	Provides a procedure or flow system through which the college's goals, objectives, policies, program analysis, long-range planning, and fiscal planning may be reviewed annually. Workshops attended by hundreds of administrators representing hundreds of small colleges.
	C+UP	College & Univ. Planning	Amer. Foundation for Management Research Hamilton, NY	Aimed to systematize the formal planning process of the college.
Comprehensive (Tailored) Approach	AOS	Administrative and Organizational System	Nat. Laboratory for Higher Educ. Durham, NC	The laboratory has produced a variety of products to assist an institution in management and planning.
Exchange Service	CAUSE	College and Univ. System	College & Univ. Boulder, CO	Clearinghouse for information related to systems design and use and a catalist for new developments in the field.

* * * \

3. Flow chart of process operations and relationships between processes

This provided one method of structuring and formalizing the review of a management system.[1]

Management Development and Training Programs

Few colleges have in-house management development and training programs. Recently, Exxon Educational Foundation and its advisors discussed the belief that the lack of formal training of higher education managers was a significant roadblock to improving efficiency and effectiveness of colleges and universities. This group of researchers determined, in terms of a few basic assumptions, that an institution of higher education was well managed when it had:

1. Defined a set of goals and objectives in terms that were quantifiable and/or observable, and when the managers and staff of the institution were thoroughly familiar and in substantial agreement with those goals and objectives

2. Put in place a set of policies and procedures for the efficient allocation and management of resources available to it for the achievement of its goals and objectives

3. Developed an organizational structure and climate that fostered a high degree of motivation among its managers and staff, and a climate conducive to working together toward

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[1] College Management System Improvement: Managerial Topics Part of the Review Phase, Working Paper, ERIC Document ED119 563 (Washington, D.C.: College Management System Improvement Project, 1976), p. 3.

the goals and objectives

The Higher Education Management Institute was established as a channel through which suppliers of materials on higher education management could direct their services and materials so as to better serve the higher education community. This project, sponsored by Exxon, was to design, develop, test, and disseminate a management training program for colleges and universities.[1]

The Higher Education Management Institute (HEMI) is a non-profit corporation that operates today under the auspices of the American Council on Education. A visit to one of the program centers in Knoxville, Tennessee, revealed that the program operated only on the campuses of three of the small colleges in Tennessee (Knoxville College, Freed Hardeman College, and Maryville College) and operation appeared to be rather inflexible and still in the experimental stage. The cost quoted for a small college was given as $13,500 over three years, with the initial billing of $8,100. Twenty-four days of actual on-campus consulting time was included. As of late 1979, HEMI reportedly has been actively marketing its services for over one year.[2]

Table 3 shows various organizations concerned with higher education management.

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[1]Management Development and Training Program for Colleges and Universities, Progress Report No. 2, ERIC Document ER149 648 (Washington, D.C.: n.p., 1978), p. 2.

[2]Interview with Bill M. Collins, Director, University of Tennessee at Knoxville Center, Knoxville, Tennessee, 18 October 1979.

TABLE 3

ORGANIZATIONS CONCERNED WITH HIGHER EDUCATION MANAGEMENT

1. AAC Association of American Colleges
2. AACJC American Association of Community and Junior Colleges
3. AAHE American Association for Higher Education
4. AASCU American Association of State Colleges and Universities
5. AAU Association of American Universities
6. AAUA American Association of University Administrators
7. ACCT Association of Community College Trustees
8. ACE American Council on Education
9. ACT American College Testing Program
10. AGB Association of Governing Boards of Universities and Colleges
11. AIR Association for Institutional Research
12. AMA American Management Association
13. APGA American Personnel and Guidance Association
14. ASHE Association for the Study of Higher Education
15. ASTD American Society for Training and Development
16. CASC Council for the Advancement of Small Colleges
17. CASE Council for the Advancement and Support of Education
18. CAUSE College and University Systems Exchange
19. CIL Council for Inter-Institutional Leadership (Consortium)
20. CUPA College and University Personnel Association
21. ECS Education Commission of the States
22. ISE/TACTICS Institute for Services to Education (Technical Assistance Consortium)
23. ETS Educational Testing Service
24. NACAC National Association of College Admissions Counsellors
25. NACUBO National Association of College and University Business Officials
26. NASPA National Association of Student Personnel Administrators
27. NASULGC National Association of State University and Land Grant Colleges
28. NCHEMS National Center for Higher Education Management Systems
29. NCURA National Council of University Research Administrators
30. POD Professional and Organizational Network in Higher Education
31. SCUP Society for College and University Planning
32. SHEEO State Higher Education Executive Officers
33. USOE United States Office of Education
    - AIDP Advanced Institutional Development Program
    - ERIC Education Resource Information Centers
    - HEGIS Higher Education General Information Survey
    - NIE National Institute of Education
    - PED Planning and Evaluation Division

Regional Accrediting Agencies: NCA, SACS, MSA, etc.

Linear Management Responsibility Guide

The Linear Management Responsibility Guide is a management technique whose development was sparked by a linear charting technique developed by Ernest Hijams and Serge A. Bern.[1] It is used in companies to relate management positions, functions, and responsibilities with each other. The linear responsibility chart describes roles, but functional relationships and responsibilities are not indicated. The chart, sometimes referred to as the management responsibility guide, usually indicates the following: (1) general responsibilities, (2) operating responsibilities, (3) specific responsibilities, (4) who must be consulted, (5) who may be consulted, (6) who must be notified, and (7) who must approve. The form it takes relates to management functional positions and responsibility-relationships with each other.

A simplified chart in Table 4 shows a guide for the actual four deanship positions of a very small, private church-related college, Tomlinson College. Such a guide is useful for organizational effectiveness and can solve sensitive relationship problems. Its value lies in its being accepted as a "guide." The larger the college, the more useful a departmental guide for each department or division would be.

The organizational chart and individual job descriptions do not substitute for the linear responsibility chart. Even using job descriptions and the organization chart simultaneously leaves a gap that must be filled. The linear

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[1]Cleland and King, pp. 366-69.

TABLE 4

MANAGEMENT RESPONSIBILITY GUIDE FOR THE FOUR DEANSHIP POSITIONS, EXECUTIVE COMMITTEE, TOMLINSON COLLEGE

12 Functions**	Dean of Business Affairs	Dean of Academics	Dean of Students	Dean of Admissions & Records	Relationship Code
Major student disciplinary actions	-	E	C H	-	A. General Responsibilities
Major student complaints (Financial/academic/general/financial aid)	E	E	C	-	B. Operating Responsibilities
Written policies for this office's handbook	F	F	C	F	C. Specific Responsibility
Curriculum exemptions to Academic Advisors	-	C H	-	-	D. Must be Consulted
Semester Schedule of Classes	E	C H I	E	B F	E. May be Consulted
College-wide academic schedules	F	C H I	F	F	F. Must be notified
Terminating students due to delinquent account	C H	D	D	F	G. Must approve
(New) Bookstore policies or auxiliary enterprise services	C	-	A	-	H. Must document in writing
Department Budgets	C H	B G	-	-	I. Must receive written approval from superior
Class size limitations at registration	-	C	-	B E	
Registration scheduling	F	F	F	C H I	
Alumni-student recruitment and fund raising activities	E	-	A	B	

**These functions give three actual sample functions from the job description of each professional.

***These relationship patterns are real.

responsibility chart fills this gap by relating the various management positions, job description functions, and responsibility-relationships with each other.

Institutional Idea Labs

The Idea Lab Concept or practice is a device used in companies in order to help invigorate management planning.[1] It is an institutionalized "think tank," allowing the company to systematically channel the performance and execution of ideas over the short and long run in the interest of company efficiency. The lab is a top-management-supported forum for the interchange and analysis of ideas, leading to the betterment of the company by developing cures to trouble spots rather than treating symptoms. It induces the generation, development, and communication of problem-solving ideas that will enhance the company's services and profits, with benefit to the community as a whole. Usually such labs are organized by outside consultants when they are employed, but this need not be the case. Figure 5 shows the structure of the lab, giving only the critical elements of its composition.

Management Audits

The behaviorialists and the human relations movement brought a new dimension to management awareness. They demonstrated that maximum efficiency in management and long-term viability of the firm lay in its management, as individuals, being cognizant of the human side of enterprise. Management

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[1] J. W. Haslett, Business Systems Handbook (New York: McGraw-Hill, 1979), pp. 20-27.

TABLE 5

STRUCTURE OF THE "IDEA LAB"

SEQUENCE OF ACTIONS BY PARTICIPANTS	ACTIONS TAKEN		
Principal Elements	Planning	Activating	Coordinating
Objectives	Step 1	Step 3	Step 4
Organization	Step 2	Step 5	Step 9
Projects	Step 6	Step 7	Step 10
Results	Step 8	Step 11	Step 12

12 SAMPLE (HYPOTHETICAL) IDEAS WHICH MAY HAVE BEEN GENERATED AT TOMLINSON COLLEGE IN A IDEA LAB SITUATION

Management audit for directors and deans.

Review in depth on-campus areas which can be improved through engagement of a consulting firm.

Mini-proposals to increase revenues and utilization of auxiliary enterprises.

Develop techniques for handling internal friction points.

Motivating students to promote current college recruitment theme.

New market surveying ideas.

Federal paperwork--how to economically cope?

Programs for college social responsibility.

Specialized newsletter (tabloids) to affect potential students.

Coordinate benefits received by college many middle-managers in frequent specialized professional seminars.

Impact human variables according to stated college objectives.

Innovative methods for painless fund-raising from church-supporting membership.

TABLE 5--Continued

FIVE-PHASE MOCK GUIDELINES
FOR STRUCTURING AN APPROACH TO NEW IDEA DEVELOPMENT

INTRODUCTION:

The Idea Lab is a structured, top-management supported approach to the development of the innovations in meeting typical management problems. It presents a forum for the interchange and cooperative formulation of new ideas, with practical applications in all aspects of the scope of college (company) management. The approach consists of the following five phases:

PHASE ONE: PROBLEM DEFINITION	The problem is defined with particular reference to results from its solution.
PHASE TWO: DATA GATHERING	Relevant documented data, including negative elements is explored.
PHASE THREE: ANALYSIS OF ELEMENTS OF PROBLEM	Each segment of the problem analyzed in all aspects and prepared for reflective review.
PHASE FOUR: SYNTHESIS OF CONCLUSIONS	Comparisons and contrastings--Ideating multiple listing of possible remedies, and selecting a solution in accordance with defined objectives.
PHASE FIVE: DOCUMENTATION	The solution and all steps leading to it are analyzed. Top management's full authority and assistance is exercised in the implementation of the chosen solution or remedy.

must undertake the time, financial commitment, and patience in order to bring programs into the workplace, so as to better orient leaders at all levels. Otherwise, individual management members must take this initiative on their own. Five concepts from the human relations movement are explained and referenced below. Table 6 devises a survey management audit that might be perfected and used by management: (1) to determine the state of its human resource orientation, (2) to develop new skills through programming, and (3) to chart the progress of the management education of individuals at all management levels.

There are three broad categories:

1. Leadership theories
2. Motivation theories
c. Communication theories

The chief goal of the human relations movement of applying behavioral science theories in companies has been increased productivity through more efficient use of human resources. According to research, six behavioral scientists' contributions have captured the imagination of managers in companies more than others.[1]

Douglas McGreggor contributed Theory X and Theory Y, showing how management's preconceived notions about people (staff) determine the performance of the leadership function.[2]

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[1] The Conference Board (New York: n.p., 1969), p. 10.

[2] Douglas McGreggor, The Human Side of Enterprise (New York: McGraw-Hill, 1960), pp. 33-34.

TABLE 6

ANNUAL MANAGEMENT AUDIT* FORM A

This form, FORM A completed by the employee. The counterpart, FORM B is completed by the employee's rater (an anonymous subordinate). FORM A and Form B are compared in a scheduled meeting with the employee and his/her direct supervisor.

OFFICE: _____ STAFF NAME: _____
RATER: _____ SALARY: _____
POSITION: _____
BROAD RESPONSIBILITY: _____
_____

INSTRUCTIONS: 1. Circle the appropriate number or fill in the space provided.
2. Answer questions at first impulse.
Estimated questionaire time: 15 minutes

WORK HABITS

1. To what extent could you estimate that you focus on the following?

Getting the job done ___%
concern for how people feel ___%
About their jobs ___%

2. How much supervision would you say the majority of your staff needs?

1 2 3 4 5 6

a little — a lot

3. How often do you feel it is necessary for you to give directions to staff?

1 2 3 4 5 6

not often — very often

4. How much direction do you normally feel is necessary to be given?

1 2 3 4 5 6

Broad Guidelines — Complete step-by-step details

5. How capable are you at working toward implementing a decision with which you may or may not agree?

1 - eager
2 - accommodating
3 - unimpressed
4 - ambivalent
5 - reluctant (covertly)
6 - reluctant (openly)

*Constructed by Albert S. Ferguson. Please do not reproduce.

TABLE 6--Continued

6. How much does your value of work depend on each of the following?

JOB SECURITY

1 2 3 4 5 6

very little — a great deal

ESTEEM FROM OTHERS

1 2 3 4 5 6

very little — a great deal

SOCIAL BELONGINGNESS

1 2 3 4 5 6

very little — a great deal

NICE OFFICE

1 2 3 4 5 6

very little — a great deal

ABILITY TO BE CREATIVE & INNOVATIVE

1 2 3 4 5 6

very little — a great deal

7. Can you assume more responsibilities?

- ☐ No
- ☐ Already have too much
- ☐ Yes
- ☐ Yes, with more salary

PERSONAL CHARACTERISTICS

8. Can you identify elements in the work environment that demotivate or dissatisfy you?

1 2 3 4 5 6

None — A few — Many

9. Do you feel you need more power and authority to get your job done?

1 2 3 4 5 6

Seldom — Usually — Almost Always

10. How confident are you about your judgement?

1 2 3 4 5 6

Not very confident — Most Confident

11. Under normal circumstances, how often do you think one of your staff members should complain of missing work due to illness?

- ☐ Often as necessary
- ☐ Once a week
- ☐ Once a month
- ☐ Once a quarter
- ☐ Once a year
- ☐ Never if possible.

TABLE 6--Continued

INTERPERSONAL RELATIONS

12. How flexible do you feel you are in your administration?

1 2 3 4 5 6

flexible (Accommodating) rigid

13. How open do you feel you are toward new ideas and new methods?

1 2 3 4 5 6

open closed

14. Do you observe to see if your staff offers help to others by doing things which are not considered part of their job?

1 2 3 4 5 6

seldom often usually

15. How much does your relationships with others tend to depend on the following?

JOB SECURITY

1 2 3 4 5 6

very little a great deal

ESTEEM BY OTHERS

1 2 3 4 5 6

very little a great deal

SOCIAL BELONGINGNESS

1 2 3 4 5 6

very little a great deal

SCOPE OF THEIR INFLUENCE

1 2 3 4 5 6

very little a great deal

16. How would you characterize your daily impact on most people?

1 2 3 4 5 6

demotivating motivating

17. List three ways in which your staff (subordinates) dissappoint you:

a-_____

b-_____

c-_____

18. How often do you review your subordinates' job description in order to ascertain that they are performing their jobs and no one else's?

☐ Yearly

☐ No schedule, but seldom

☐ Monthly

☐ No schedule, but often

19. Rank your assessment of your present abilities in the following areas:

CONCEPTUALIZING

1 2 3 4 5 6

Low High

PLANNING

1 2 3 4 5 6

Low High

IMPLEMENTING

1 2 3 4 5 6

Low High

TABLE 6--Continued

ATTENDING TO DETAIL

1 2 3 4 5 6

Low High

CONTROLLING STAFF

1 2 3 4 5 6

Low High

20. How important is it to you to receive credit for the special projects you perform?

1 2 3 4 5 6

Not Important Very Important

21. Do you prefer your committee meetings operate on a fixed agenda?

1 2 3 4 5 6

Seldom Usually Always

22. How do you feel concerning seeking your staff's imput (approval) of new forms and/or new procedures?

1 2 3 4 5 6

Should Always Seek Should Usually Seek Special Cases Only

23. What is the range of your information?

1 2 3 4 5 6

Narrow Broad

24. In a public setting, how comfortable are you about representing your college?

1 2 3 4 5 6

Usually Uncomfortable Comfortable

25. List three of your attributes (in the sphere of your job) which make you feel good about yourself.

a-_____

b-_____

c-_____

TABLE 6--Continued

QUESTIONAIRE THEORETICAL KEY

(Designed for total substantive evaluation or basically quantitative scoring)

			Key to numerical scoring by category (concept)
Questions 2, 3, 4, 11,14,17, 18	Designed to test	McGreggor's Theory X and Y	The higher the score, the more Theory X oriented the administrator. Total score possible=34. #17 not scored.
Questions 1,11	Designed to test	Blake & Mouton's Managerial Grid	The Higher the Score, the more "production oriented" the administrator. Total score possible=7. For #1: if over 50% for "job" score 1; if under 50% for "job" score 0.
Questions 7, 8, 9, 16	Designed to test	Herzberg's Motivators	The higher the score--manipulating job-related factors can increase administrator's motivation. Total score possible=22.
Questions 6, 9,15 24	Designed to test	Maslow's Hierarchy of Needs	Evaluation by written answers only.
Questions 5,10,12, 13,14,18, 20,21,22	Designed to test	Likert's Participative Management Skills	The LOWER the score, the more "participative management oriented" the administrator. Total score possible=52.
Questions 19,23,25	Designed to test	General Management Skills	The HIGHER the score, the more qualified the administrator (overall) as self-assessed.

FORM B is identical to FORM A, except that verbs, pronouns, objects, etc. are altered to reflect the fact that the management personnel is being rated

Abraham H. Maslow contributed the "Hierarchy of Needs," showing that satisfactions of needs are powerful motivators in people, and people's needs must be understood by managers.[1]

Frederick Herzberg contributed that there are certain phenomena called "satisfiers" and "dissatisfiers" that either motivate or act as maintenance (or hygienic) factors in people in the job environment. Both of these concepts have powerful job-enriching impacts.

Rensis Likert contributed the linking-pin idea, which demonstrated interaction-influence principles, thus underscoring the crucial role of supervision in relation to group productivity. Likert showed, through a comparative model, how organization and performance-characteristics vary according to the varying management styles of authoritarian (exploitive to benevolent-authoritative) and participative (consultive to participative-group). Using various conditions inside the organization, and comparing the effect of action on them under the four styles of leadership, he showed the participative management technique as being the most successful in terms of productivity in companies.[2]

Robert Blake and Jane Mouton contributed the managerial grid concept as a framework for constant management self-evaluation, and for increasing the concern of management

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[1]Richard J. Lowry, ed., Dominance, Self-Esteem, Self-Actualization: Germinal Papers of Abraham H. Maslow, published for the International Study Project (Monterey, Calif.: Wadsworth Publishing Co., Inc., 1973), p. 44.

[2]Rensis Likert, The Human Organization: Its Management and Value (New York: McGraw-Hill, 1967), pp. 36-39.

regarding their orientation for being both people- and production-minded. Effective leadership depends upon a multitude of conditions. Many studies have been done in companies to determine the behavioral aspects of the degrees of these two leadership orientations in the personalities of management personnel.[1]

Management by Objective

Management by Objective (MBO) and Management by Results (MOR) places emphasis on predicting the future and improving individual and organizational efficiency through effective and active participation and involvement of managers, supervisors, and employees at every organizational level. The study lists and explains eight important steps to the MBO/MOR process. They are as follows:

1. Defining roles and missions at every level and functional unit
2. Determining key results in areas of priorities, policies, staff development, and innovation
3. Identifying and specifying indicators of effectiveness in key result areas
4. Selecting and setting objectives for specific areas
5. Preparing action plans
6. Establishing controls and an effective feedback system

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[1]Robert R. Blake and Jane Mouton, Corporate Excellence Through Grid Development: A Systems Approach (Houston: Gulf Publishing Co., 1968), pp. 21-29.

7. Determining communication methods

8. Implementation

Procedural details are then given.

This is well in line with Robert E. Lahti who defined management as the effective use of limited resources to achieve desired results.[1] A profile of MBO use today, along with the names of a few of those who contributed to the field is shown in Table 7.[2]

Cost Analysis Systems

> Analytically derived cost information is the most underestimated and therefore underused tool available to college and university administrators today. As a consequence, much of the decisions on which decisions are based is fuzzy and impressionistic, comparisons with other institutions are impossible to make, and there is no way of knowing whether the decisions which drive higher education are economic and sound.[3]

Cost analysis runs on a continuum from "hard management" at one end to "soft management" at the other end. Hard management refers to areas where costs can be developed with a high degree of accuracy and clarity, therefore having considerable influence on the choice of the best alternative. Examples of such are lease/buy or make analysis, setting of

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[1]Robert E. Lahti, Innovative College Management (San Francisco: Jossey Bass, Inc., 1975), p. 5; and Possible Applications of Management by Objective to the Community College, ERIC Document ED149 819 (Washington, D.C.: n.p., 1978), p. 11.

[2]Diane Borst and Patrick J. Montana, Managing Non-Profit Organizations (New York: AMACOM Press, 1977), pp. 140, 144.

[3]Using Cost Analysis in Internal Management in Higher Education, ERIC Document ED136 638 (Washington, D.C.: n.p., 1977), p. 5.

TABLE 7

A PROFILE OF MBO USE TODAY

	Government	Education	Health	Religious & Charitable	Associations Etc.
1. Applying Management by Objectives to non-profit organizations, Dale D. McConkey	x	x	x	x	x
2. Management by Objectives for Schools, Thorne Hacker		x			
3. MBO in Church Organizations Dale D. McConkey				x	
4. Tailoring MBO to Hospitals by Herbert H. Hand and Thomas Hollingsworth			x		
5. A Study of MBO in a professional Organization by Y.K. Shehy and Howard M. Carlisle		x			
6. The future: its challenge and its promise. Dale D. McConkey	x	x	x	x	x

SOURCE: Diane Borst and Patrick J. Montana, Managing Non-Profit Organizations (New York: AMACOM Press, 1977), pp. 140, 144.

setting of prices closely related to costs (as in overhead reimbursement formulas and auxiliary enterprise charges) and mathematical or probabilistic models that give the cost effects of certain actions and tradeoffs. Soft management refers to areas where cost information is diagnostic or indicative, rather than definitive; where approximations will suffice as bases for decision making. Examples are assessing the marginal costs of new students or programs, setting prices not directly related to costs, charting the relative costs of instruction overtime, etc.

With the above continuum in mind, the following areas listed were given as particular areas in academia where cost analysis should be used and illustrative information is given in this study to describe the method. The areas are:

1. Trend and comparative analysis in instruction (in an attempt to show the cost of instruction over time)

2. Estimating marginal cost-benefit relationships (in an attempt to discover at which point the law of diminishing marginal utility beings to operate)

3. Projecting alternative costs (in an attempt to reduce unit costs by substituting less expensive ways of achieving the same objectives)

4. Institutional self-education (in an attempt to develop memory cells so as to check the past against the present cost variables)

Obviously, with no type of automation, a very small college business office need rely only upon static historical costs available in files in the filing cabinets or storage

areas. For them, a high degree of "cost consciousness" might well be sufficient to suit their needs. Growth in inflationary times makes such a strategy inappropriate, if maximum use of scarce resources is an operations objective.

Management of Marketing

Management of marketing is that management aspect of marketing that combines and coordinates the marketing effort of all phases of the firm or academic institution, thus ensuring that the marketing effort of each segment complements and supports that of the whole.

Market planning, both in the long run and in the short run, is essential for three major reasons:

1. To create a formal structure of objectives and controls in order to help facilitate quick and efficient decision making

2. To force management to think systematically about marketing decisions

3. To provide the necessary incentive and stimulation for staff to achieve future tasks, through presenting them with clear and attainable objectives

A market plan begins with the identification of the mission of the institution and ends with a commitment of all segments of the campus community to serve it.[1] Institutional drift is a phenomenon largely caused by a poorly defined and articulated mission. Having a college mission relevant to

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[1]Phillip Kotler, "Applying Marketing Theory to College Admissions," A Role for Marketing in College Admissions (New York: College Entrance Exam Board, 1976), p. 57.

current economic and market realities is the first step toward development of a successful marketing plan. Figure 1 illustrates a flowcharting of a marketing planning model for the college's Admissions Department. It is an annual planning model to achieve a particular admission target.[1] Figure 2 shows a planning model that applies to planning for marketing for the entire college.

Team Building

Team building efforts may result in the solving of problems and in the accomplishing of major projects by the coordination of existing work groups.[2] As long as the accomplishment of a certain objective involves persons in more than one department or work group, a team approach becomes the only way to effectively achieve the objectives. With such an approach, each group can internalize the importance of the task and the importance of their role in its fulfillment. A written framework, such as that shown in Table 8, clearly lays out the responsibility of each part of the team.

An example or two might prove helpful here. In a company, the objective or task might be inventory control, gradually replacing an ineffective inventory system coupled with a lack of management initiative and responsibility with

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[1]Jack L. Engledow and Ronald D. Anderson, "Putting Small College Admissions in a Marketing Mode," College and University, Journal of the AACRAO 54 (Fall 1978):10.

[2]Blake and Mouton, p. 154.

FIGURE 1

PLANNING FOR MARKETING

ANNUAL PLANNING MODEL

for a

Small College Admissions Department

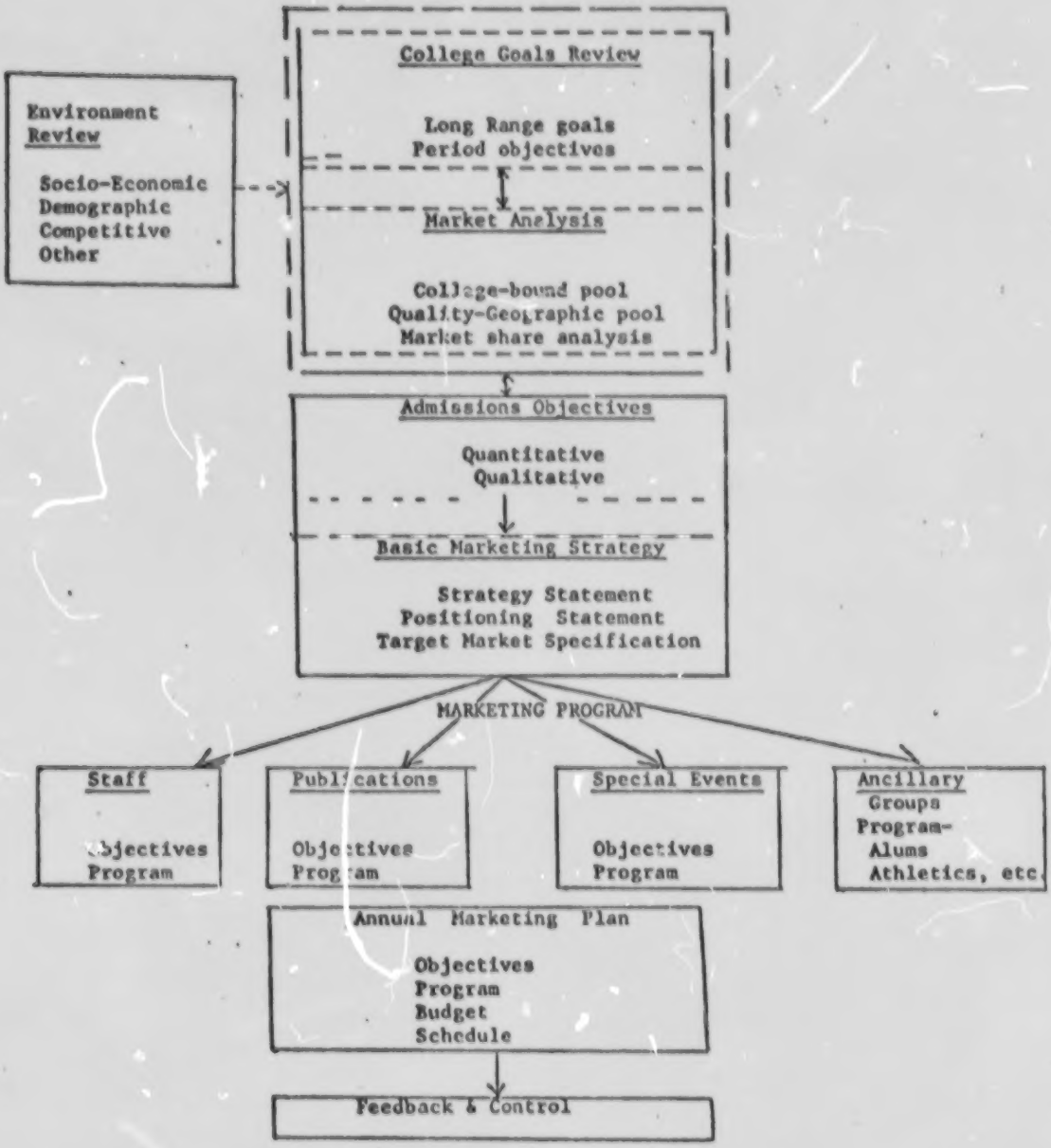

FIGURE 2

PLANNING FOR MARKETING

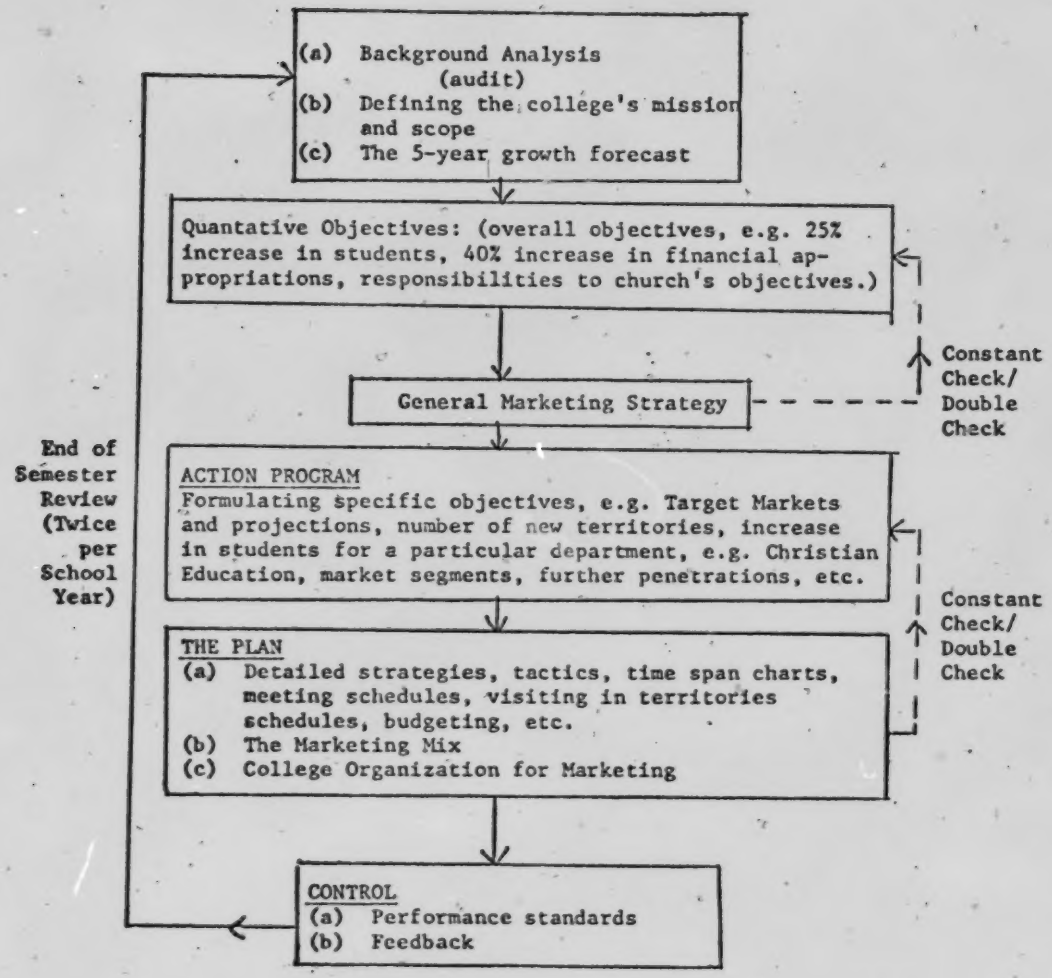
(a) Background Analysis (audit)
(b) Defining the college's mission and scope
(c) The 5-year growth forecast
Quantative Objectives: (overall objectives, e.g. 25% increase in students, 40% increase in financial appropriations, responsibilities to church's objectives.)
General Marketing Strategy
Constant Check/ Double Check
End of Semester Review (Twice per School Year)
ACTION PROGRAM
Formulating specific objectives, e.g. Target Markets and projections, number of new territories, increase in students for a particular department, e.g. Christian Education, market segments, further penetrations, etc.
Constant Check/ Double Check
THE PLAN
(a) Detailed strategies, tactics, time span charts, meeting schedules, visiting in territories schedules, budgeting, etc.
(b) The Marketing Mix
(c) College Organization for Marketing
CONTROL
(a) Performance standards
(b) Feedback

TABLE 8

FRAMEWORK FOR A MODEL PLAN FOR ACCOMPLISHING A TEAM OBJECTIVE

Project Name:

Nature of Problem:
Extent:
Impact:
Causes:

Objective:

Action Step	Responsibility	Jointly or Coordinated with	By-product(s) Reports	Comments	Completion DATE
					July 3
					July 7
					July 12
					Sept. 1
					Sept. 8
					Sept. 22
					Oct. 1
					Oct. 16
					Dec. 15
					Dec. 31

Organizing for Accomplishing a Team Objective through Managerial Grid Organization: using the strategic planning model for project-planning (as explained in Corporate Excellence Through Managerial Grid Organization Development by Blake & Morton, p. 154).

a modern inventory system fully supported by management in all areas. In a college, an objective might be one that aims at reducing skyrocketing energy costs in the physical plant. Coordinating all departments, including offices, dormitory, and other auxiliary enterprises would be possible only through the team approach.

There appears to be great promise to accomplishing objectives through the team building approach, along with the added benefits of esprit de corps that is produced within the institution. Table 9 describes some of the characteristics usually associated with well-organized teams.

Motivation Systems and Productivity Consciousness

A "system" has been defined earlier as an array of components designed to accomplish a certain objective according to a plan. Motivation systems in the work setting prompt employees to excel and then support them while they are excelling. There are various myths about motivation and there are certain realities. There is, however, a basic model that every college executive should understand, even though it is felt that most college executives and middle managers do not spend a great deal of time being concerned about or sensitive to support for motivation in their work environments.

A satisfied need no longer motivates behavior. Then, in terms of employee performance, it may be said that:

TABLE 9

SOME OF THE CHARACTERISTICS USUALLY ASSOCIATED WITH WELL-ORGANIZED TEAMS

Effective teams share a number of characteristics. Some of the characteristics normally associated with well organized and effective teams are listed as follows:	SHARED LEADERSHIP The entire team is involved in setting team objectives and making decisions. Responsibility for team success is shared by all members.	UTILIZATION OF TEAM RESOURCES Full human talents of team members are effectively used. People have ample opportunity to contribute. Individuals grow and develop by being part of the team.
GOAL CLARITY Team has clear objectives and knows where it is going. There is a high level of team commitment and objectives are usually accomplished on time.	TRUST AND OPENNESS There is a high level of trust in the group. People feel free to say what they're thinking and feeling. All ideas are accepted by the group and judged on their merits.	INFLUENCE & POWER An individual's competence, technical expertise and unique knowledge are the primary source of influence and power in a given decision. Power in the group is shared and based upon an individual's ability to make contributions.
DECISION MAKING Decisions are normally made by consensus of the group. Procrastination is rare. Most decisions are carried out.	COOPERATION People help each other and ask for help when it is necessary. Cooperation is seen as a way of meeting the overall objectives of the team.	TEAM MEMBERS SATISFACTION Team members feel good about their own contributions to the team. There is a strong sense of belonging to the team.
DECISION MAKING Alternatives and new or different ideas are encouraged and considered. Options are evaluated openly against decision objectives, regardless of who suggested them.	MEETING EFFECTIVENESS Team meetings are effective. There is usually lively discussion in which people feel free to express their points of view. Team members periodically discuss the effectiveness of the meetings and do things to make the meetings better.	TEAM MAINTENANCE Feelings, emotions and conflicts are recognized as legitimate. Personal and inter-personal concerns are legitimate concerns of the team. Conflict and team problems are faced and solved openly.

SOURCE: Workshop Handbook on Management for College and University Executives, Regular Workshop Series (Snowmass Institute: n.p., 1980), p. 47.

P_{LV}	=	N_{LV}	x	Ex_{LV}
Performance level		Need Level		Expectations that needs will be achieved/satisfied in that environment

Frederick Herzberg, in speaking about "hygiene" factors, explained that there are certain factors in the work environment that are very important, but rather than acting as motivators, they act simply as factors that maintain the status quo.[1] Such factors are competitive wages, job tenure, vacations, fringe benefits, good relationships, etc.

On the contrary, the real "motivators" are factors such as achievement, recognition, opportunity for personal growth, value congruence, opportunity for advancement, responsibility and control, autonomy, etc. The requirement for staff then is clear. Since people differ, specific motivation systems that are not hygienic in nature are not possible. The motivation system that results must be a byproduct of individual managers working to create a proper organizational climate: an atmosphere that is itself saturated with motivating elements. Within this overall atmosphere, the particular needs of individuals may then be addressed and the special needs of others attended to on a one-to-one basis.

A sensitivity to educational productivity is a sensitivity to ways of obtaining the greatest return on the

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[1]Stan Kossen, ed., The Human Side of Enterprise (San Francisco: Canfield Press, 1978), pp. 113-17.

investment of the educational dollar. The American Association of Community and Junior Colleges co-funded the publishing of a description of a productivity project performed by Bill J. Priest and John Pickelman in the Dallas County Community College District (DCCCD). The published paper was an accounting of the experiences of one multi-college community college district in its struggle to identify, implement, and evaluate measures that increased efficiency while either maintaining or improving the effectiveness of each of its operations.[1] Some of their concepts on productivity are outlined below, since the success of the DCCCD operation was noteworthy. The program itself is not described.

Productivity in a traditional sense can be expressed by the following equation:

$$\text{Productivity} = \frac{\text{Output}}{\text{Input}}$$

Therefore, if input remains constant as output decreases, productivity decreases. Inputs in the productivity equation in the college or university setting may be seen as variables such as manpower--the investment in faculty, staff, students and administration, the mission of the college, the technology as it relates to course design and course packaging, capital expenditures, and environmental inputs such as government requirements. Outputs may be viewed as

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[1]Bill J. Priest and John E. Pickelman, Increasing Productivity in the Community College--An Action-Oriented Approach (Washington, D.C.: American Association of Community and Junior Colleges Press, 1976), pp. 1-35.

the number of students graduating, number of students completing the program, number of students accepted into senior colleges. Outputs that defy quantification are variables such as impact on society, the effectiveness of learning, and the value of the public service that is given. Also, there are factors that reflect the quality of the outputs such as job placement and salary histories after graduation.

There are other factors which, although not included in the productivity equation, impact educational productivity. These relate to the management structures and the process of management in the institution. Some examples are unit of command and span of control, systems and procedures, employee relationships, job descriptions, organizational design and climate, and, lastly, administrative style.

Finally, productivity-consciousness embraces the concept that an institution (or business) must strive for improvement in order to avoid stagnation and/or possible involuntary retrenchment. An organized interest in productivity will produce cost savings and also new income (as was evidenced in the DCCCD experience). Productivity does not necessarily mean people will work harder, but instead encourages them to work smarter or better. Instead of a macro approach of trying to identify and reduce unit costs, each individual may be made to view his/her individual contribution to the total departmental effort. The micro approach to productivity improvement on the other hand emphasizes that only through examining the separate functions of the college and also their interrelationships, can improvements be made.

CHAPTER III

PROCEDURES AND DATA ANALYSIS

Introduction

This chapter reviewed and amplified the procedures used to develop, test, distribute, receive, and analyze the checklists. The results of the survey are presented along with the tables and explanations. The criteria and procedures used to select the exemplar colleges and develop an interview plan common to all are discussed. The data, both from the checklist and the interviewing of the exemplar colleges, was analyzed.

This chapter was divided into five subheadings:

1. Checklist Development
2. Checklist Results
3. Analysis of Data from Checklist
4. Selection and Visiting of Exemplar Colleges
5. Analysis of Data from Exemplar Colleges

Checklist Development

The traditional functions of management given in the introduction to the literature review were listed as: (1) planning, (2) organizing, (3) staffing, (4) leading, (5) evaluating, and (6) developing. The eleven techniques explained in the literature review were obtained by researching the following question: Which tool or tools

might be identified; which would assist the college to more scientifically perform that particular traditional management function? In addition, other items were added to the list. They were obtained as a byproduct of the literature review process and the researcher's college management experience. They were:

1. Systems manuals
2. Formal institutional development plans
3. Administrative time planning or time management
4. Professional development plans for top and middle management
5. Interview guides
6. Formalized institutional feedback channels
7. Formalized structure for maximizing the resources spent on professional seminars attended by top and middle managers

The checklist constructed as outlined above appears in Appendix A. It was pre-tested and discussed with management personnel at Tomlinson College for the purpose of eliminating language ambiguity, comprehension, and the need to provide an amount of explanation of the terminologies used, since it is common for various authors to use different terminologies to describe the same management concept or practice. After being satisfied with the ease of language use, comprehension, layout, and format, the checklist was mailed out. As indicated earlier, the checklist was mailed to the chief fiscal officers whose names were obtained from the Institutional Directory for Higher Education in Tennessee.

The chief fiscal officers were chosen due to the high likelihood of their being familiar with the management processes at their college or university.

Checklist Results

Tables 10 through 14 illustrate the rate of return from the checklist. There was a 62.2 percent overall return rate. Of those mailed to public institutions, 86.4 percent were returned, and 53.4 percent of those mailed to private institutions were returned. A composite profile of the actual responses, which reported statewide college and university use of the management techniques/practices outlined in the questionnaire/checklist, was then constructed (Table 15). The composite profile indicated exactly how many colleges and universities admitted to using a particular management technique or practice; responses were separated according to private, public, and private church-related college categories. Table 16 shows the responses to the last item on the questionnaire.

Finally, emphasis was turned to the group of responses from institutions that described themselves as being private and church-related. Using the identical questionnaire, a statewide profile of actual responses from these colleges, according to enrollment, was drawn. This indicated the reported use of the various management techniques/practices in three groups of college enrollments: 0 to 500, 501 to 1000, and over 1000 (Table 16).

TABLE 10

RETURN RATE OF INSTRUMENTS MAILED

No. Mailed	No. Returned	Percentage Returned	No. of Usable Returns	Percentage Usable Returns
82	51	62.2%	49	59.8%

TABLE 11

RETURN RATE OF INSTRUMENTS FROM PUBLIC INSTITUTIONS

No. Mailed	No. Returned	Percentage Returned	No. of Usable Returns	Percentage Usable Returns
22	19	86.4%	19	86.4%

TABLE 12

RETURN RATE OF INSTRUMENTS FROM PRIVATE INSTITUTIONS

No. Mailed	No. Returned	Percentage Returned	No. of Usable Returns	Percentage Usable Returns
60	32	53.4%	30	50%

TABLE 13

RETURN OF INSTRUMENTS FROM PRIVATE CHURCH-RELATED INSTITUTIONS

No. Mailed	No. Returned	No. of Usable Returns	No. of Usable Returns as a percentage of total instrument return
---	18	17	-----

NOTE: Directory list categories of "public" and "private" universities and colleges only. This institution-category here is taken from that reported by the responding college. These are included under the category of "private."

TABLE 14

REPORTED USE OF VARIOUS MANAGEMENT TECHNIQUES/PRACTICES

QUESTIONNAIRE ITEMS	Composite profile of actual responses reporting statewide college and university use of the following management techniques/practices listed. ("yes" responses).				
	TOTAL NUMBER	As a % of Total Usable Checklists Returned	Private as Reported	Public as Reported	Private church-related (as reported)
A Management Information System for overall operations	16	32%	3	8	5
A Management Information System for planning and/or budgeting and/or accounting	34	69%	9	17	8
A formal or informal review of management information system	28	57%	7	14	7
A Linear Responsibility Chart (or Management Responsibility Guide) to delineate responsibility relationships among management staff by divisions	32	65%	7	13	12
A Management Audit (at least annually) to assess the state and progress of management education and development	15	31%	5	5	5
A Systems Manual, in which the individual functions of each department are flow charted	11	22%	3	5	3

TABLE 14--Continued

A formal Institution Development Plan incorporating the institution's mission, and a formal structure for reviewing it at least once a year	33	67%	18	8	7
An Idea-Lab (a structured top management-supported forum for the interchange and analysis of ideas/ innovations)	11	22%	2	3	6
A formal overall institutional marketing plan, that encompasses all major phases of the institution	12	24%	4	3	5
The college or university's marketing activities placed under a specific person, e.g., on vice-president level, (who is responsible for the planning, implementing, coordinating, and controlling of activities)	24	49%	6	8	10
A Cost Analysis System (to store analytically derived and otherwise obtained, historical cost data, for future decision-making, cost comparisons, projections, etc.)	15	31%	5	10	5
Any type of In-house Management Development and Training Program	13	26%	2	7	4
A periodic procedure for promoting awareness in administrative Time Planning or Time Management	11	22%	1	5	5
A requirement for individual Professional Development Plans for top and middle management	10	20%	3	6	1
A standard model or plan for accomplishing a Team Objective	13	26%	3	7	3

TABLE 14--Continued

A Motivation Model (or system) to influence and increase employee motivation	7	14%	1	4	2
Interview Guides, (to systematize all new employee interviewing and match new employees to the organization or department)	13	26%	1	9	3
Organized means for receiving feedback on college operations from the college constituency	29	59%	7	15	7
Formal Structure for periodically sharing technical information, obtained by various administrative staff in outside seminars	14	29%	2	7	4

TOTAL NUMBER OF USABLE CHECKLISTS RETURNED 49

The results showed that items drawing the largest amount of total responses were management information system for budgeting and/or accounting and/or planning, formal institutional development plans and established channels for receiving feedback on college operations from the college constituency.

The results showed also, that among the reporting colleges, the least amount of attention appeared to have been placed in areas such as monitoring employee motivation, frameworks to receive and analyze ideas from the college community, use of written interview guides, in-house management development and training programs developing and using systems manuals, requiring professional development plans for management, time management programs, formal institutional marketing plans encompassing all major phases of the institution and structures for achieving team objectives.

TABLE 15

OTHER MANAGEMENT PRACTICES

The final item on the questionnaire provided an opportunity for respondents to indicate other management practices that were being used in their institutions which were being found to be helpful in performing the management task. Also, after each item on the checklist, a space was left to the right, and the respondent was asked to comment. The responses are indicated below in note form.

1. COLLEGE A's Executive Management Committee meets weekly and is made up of president, executive vice-president and all division heads.

2. MBO was cited by a few colleges, used primarily in planning for institutional development.

3. COLLEGE B uses an advisory committee for obtaining feedback on the college's operation from their college constituencies.

   --The personnel office develops interview guides for use in all departments.

   --There is an annual cost study for the THEC (Tennessee Higher Education Commission): they accumulate historical cost as part of this exercise.

   --There is a statewide Community College Institutional Accounting System (IAS). This is what is used as management-Information System for budgeting and accounting.

4. Two universities reported their use of HEMI programs and the MODELNETICS technique to assist in management and management development.

5. COLLEGE D uses student officer groups to assess the level of satisfaction on campus, as a part of their "feedback on college operation" process.

6. COLLEGE E is developing a PME system (Planning, Management and Evaluation), with the assistance of a grant.

7. COLLEGE F has a monthly meeting of all officers to share ideas and to discuss problems. This is in addition to the meetings of its executive council.

8. Each year after school is out, a post-school conference is held by COLLEGE G in order to review the year's work.

   Also, each person who attends an outside conference during the school year is required to make a formal report to the entire college.

9. COLLEGE H has a management strategy of delegating accountability and responsibility to the lowest possible levels in the various areas.

The responses in Table H cannot be summarized as such, but various useful ideas were assessed and addressed in Chapters 4 and 5.

TABLE 16

STATEWIDE COMPOSITE PROFILE OF ACTUAL RESPONSES FROM SMALL CHURCH-RELATED COLLEGES

Statewide composite profile of actual responses from small church-related colleges according to enrollment; indicating reported use of the following management techniques/practices. ("yes" - responses)

QUESTIONNAIRE ITEMS	ENROLLMENT				
	Total Number	As a % of Total (Usable) Checklists Returned	0-500	501-1000	1001-over
A Management Information System for overall operations	5	10%	0	2	3
A Management Information System for planning and/or budgeting and/or accounting	8	16%	0	3	5
A formal or informal review of Management Information Systems	7	14%	0	3	4
A Linear Responsibility Chart (or Management Responsibility Guide) to delineate responsibility relationships among management staff by divisions	12	24%	2	4	6
A Management Audit (at least annually) to assess the state and progress of management education and development	5	10%	1	2	2
A Systems Manual, in which the individual functions of each department are flow-charted	3	6%	1	2	0

TABLE 16--Continued

	Total	Total % Usable	0-500	501-1000	1001-Over
A formal Institution Development Plan incorporating the institution's mission, and a formal structure for reviewing it at least once a year	7	14%	1	3	3
An Idea-Lab (a structured top management-supported forum for the interchange and analysis of ideas/ innovations)	6	12%	2	2	2
A formal overall institutional marketing plan, that encompasses all major phases of the institution	5	10%	1	2	2
The college or university's marketing activities placed under a specific person, e.g., on vice-president level, (who is responsible for the planning, implementing, coordinating, and controlling of activities)	10	20%	4	2	4
A Cost Analysis System (to store analytically derived and otherwise obtained, historical cost data, for future decision-making, cost comparisons, projections, etc.)	5	10%	1	2	2
Any type of In-house Management Development and Training Program	4	8%	0	2	2
A periodic procedure for promoting awareness in administrative Time Planning or Time Management	5	10%	0	2	3
A requirement for individual Professional Development Plans for top and middle management	1	2%	0	0	1
A standard model or plan for accomplishing a Team Objective	3	6%	1	1	1

TABLE 16--Continued

	Total	Total % Usable	0-500	501-1000	1001-Over
A Motivation Model (or system) to influence and increase employee motivation	2	4%	0	0	2
Interview Guides, (to systematize all new employee interviewing and match new employees to the organization or department)	3	6%	0	1	2
Organized means for receiving feedback on college operations from the college constituency	7	14%	1	4	2
Formal Structure for periodically sharing technical information, obtained by various administrative staff in outside seminars	4	8%	1	1	2

Total number of usable checklists returned.....49

Total number of usable checklists in this class....17

Among the small, private church-related colleges it is of note to the items generating high or low responses were consistent with the profile of responses for the total population of reporting colleges (See Table G and notes at the bottom). The fact that most of these colleges in Table I had one person responsible for the total college's marketing effort was undoubtedly a function of the small size of many of these colleges and hence shortage of management personnel.

There was a 62.2 percent overall return rate from the checklists. Of this 62.2 percent, 59.8 percent were usable returns. Unusable returns were those returned with or without cover letters where the fiscal officers indicated a willingness to participate but were too unfamiliar with the concepts to respond. There were two such returns.

The responses showed a very high rate of return--86.4 percent from public institutions--most of which were found to be large public institutions. Of those mailed to private institutions, only about half (53.4 percent) were returned. Of the returns from these private colleges, 56 percent were responses from private "church-related" colleges.

Analysis of Data from Checklist

1. A large number of colleges had a management information system for planning and/or budgeting and/or accounting. Thirty-four out of forty-nine reporting colleges had such a system. Eight of the thirty-four were church-related colleges, mostly with enrollments over 1,000.

2. A management information system for the overall campus operations was not as common: sixteen out of the fifty-one reporting colleges had one.

3. Thirty-two out of forty-nine reporting colleges indicated that they had a management responsibility guide (or linear responsibility chart). This figure was probably doubtful since individuals unfamiliar with this tool confused it with a college organization chart.

4. Fifteen out of forty-nine reporting colleges had an annual management audit. Three out of the fifteen were church-related colleges with enrollments under 1,000.

5. Ten out of forty-nine reporting colleges had a requirement for individual professional development plans for top and middle management. Only one was a church-related college, and it was in the enrollment class of over 1,000 students.

6. Eleven out of forty-nine reporting colleges had developed systems manuals for their departments.

7. Thirty-three out of forty-nine reporting colleges had a formal institution development plan, along with a formal structure for reviewing it at least once a year. Seven of these colleges were private church-related colleges. Out of the church-related colleges with enrollment under 500, only one had a formal institutional development plan.

8. Twenty-four out of forty-nine reporting colleges saw merit in having the overall college or university's marketing activities coordinated or managed by one specific person on the vice-president level. However, only twelve out of the forty-nine reporting colleges actually had a formal, written, overall institutional marketing plan that encompassed all major phases of the institution.

9. Eleven out of forty-nine reporting colleges had idea-lab types of structures

10. Eleven out of forty-nine reporting colleges had periodically promoted management time awareness

11. Thirteen out of forty-nine reporting colleges had some organized framework that allowed them to achieve a team objective.

12. Thirteen out of forty-nine reporting colleges had developed interview guides that were used.

13. Thirteen out of forty-nine reporting colleges had an in-house management development and training program.

14. Seven out of forty-nine reporting colleges regularly addressed the question of employee motivation in an organized fashion.

15. Fifteen out of forty-nine reporting colleges had developed a cost analysis system probably in response to inflationary times.

16. A large number of respondents, twenty-nine out of forty-nine reporting colleges, recognized the need for constructing an organized means for receiving feedback on the college's operations from the college's constituency. However, only seven of these were respondents in church-related colleges.

17. Despite the financial resources being spent by colleges to attend professional seminars, only fourteen of forty-nine reporting colleges had a formal structure that enabled persons returning from seminars to share the technical or useful information obtained.

Selection and Visitation of Exemplar Colleges

The checklist responses and results analyzed from the tables served to perform a number of important functions,

a major one of which was to select from a larger population, a smaller group that could be visited and studied further. The favorable responses from the survey and the information relating to the frequency of use of techniques/practices among colleges, and also among colleges of various types and sizes, provided primarily what might be viewed as interesting information. However, the focal point of this study was directed to the important question of what was the effect of certain modern or scientific management techniques as they found use in certain college settings. What could be learned from the actual use of these techniques/practices from the users? What important implications could this have for small, private church-related colleges? Which lessons learned assisted in suggesting the applicability of these techniques/practices to the management of small, private church-related colleges? What lesson learned could be directly applied to such colleges?

Three colleges, henceforth called College A, College B, and College C, were chosen. College A is a community college with enrollment of around 4,000 students. College B is a small, private church-related college with an enrollment of approximately 600. College C is a small, private Christian college with an enrollment of about 800. Each showed a wide use of the management techniques in their institution. The respondent was written and then telephoned three days later to make an appointment. When the written request for a visit was made, a copy of the checklist they had earlier completed was returned to them for reference. Anonymity was guaranteed.

The questions developed for use in interviewings at the exemplar colleges were designed:

1. To produce qualitative answers that were descriptive and interpretative

2. To produce such answers in all three types of settings selected

3. To explore the perceptions of the respondents regarding their answers on the questionnaire they completed

The aim, therefore, was to be able to interpret the answers to the questions across the settings found in the three colleges, and thus develop useful knowledge of the potential and applicability of these scientific management techniques to assist in the administration of the small, private church-related college. The interview questions were as follows:

Introductory-Type Questions

1. What needs at your institution made it necessary to begin to use scientific management techniques?

2. How has the use of these techniques enhanced your institution's mission or helped you to grow?

Question-Set Asked Concerning Each Checklist Item Answered "Yes"

1. Have you ever worked in a college setting without a _____ system? Describe it. What size would you feel a college should be in order to need or fully benefit from a _____ system?

2. Why use this _____ system? What was inadequate

about the old system?

3. What criteria do you use to evaluate success with the _____ system? What items make for a good _____ system in your view?

4. In your view, what features of this _____ system make it adaptable for use in small colleges?

The questions were then checked for language ambiguity by testing on management personnel at Tomlinson College. The profiles of the interviews and a summary of the overall discussions follow. For each college visited, a brief introduction is given that describes its type, demography, etc., along with responses to the introductory-type questions. A management tool is cited and the paragraphs that follow describe, in the interviewer's language, the gist of the interviewee's responses to the basic four-part question-set.

College A

College A is a state-supported, two-year coeducational college, part of the public State University and Community College System of Tennessee, with an enrollment in excess of 4,000 students. The college has a full range of technical (engineering-oriented) programs along with a full range of liberal arts programs. A few years ago, the college experienced a change in its top management, bringing in individuals who were management-oriented and advocates of using scientific management techniques in order to better utilize resources, and also to relate more meaningfully to the community. It was around this time that the technical college curriculum was

expanded to include a full liberal arts slate of programs and also programs the community desired. Enrollment increased fourfold. The top leadership, empowered with the expertise of the chief fiscal officer, undertook to construct the systems and processes to enable the college to function efficiently, to best utilize its resources, to continue to grow and to improve the quantity and quality of service to the community.

Management Information System for Overall Operations, Planning, and Budgeting and Accounting

College A's chief fiscal officer had never worked in a college without a data-based information system that performed some type of function--either budgeting, accounting, planning, or coordinating overall operations. His feeling was that college size should never be the major consideration in decisions relating to the usefulness of an information system. All colleges, regardless of size, need good information for management decision-making. That was sufficient justification. The computer simply pulled together and analyzed data for management, thus relieving management of the drudgery of having to do it otherwise. All organizations with the ability and resources could profitably use a management information system; for small colleges, there are small computers and "canned" programs that can be purchased inexpensively. Time sharing with area colleges was also a possibility.

The college used the POISE software package (data,

management system). It was in use for a little over one year. The major utility as a management information system was easy access to it by clients or the users instead of the programmers or directors of data centers. A password or access to the register of passwords was needed to obtain a file or change information in a file. The fiscal officer saw the POISE system being useful to small colleges due to its small cost, and the fact that no programming staff was needed.

The POISE system, in addition, had a planning function. The fiscal officer felt that this gave decision-making a degree of forward or ongoing character. It helped to ensure that college decisions were consistent with college objectives and the overall mission of service to the community and providing the best possible educational environment for the learning process to take place. There was no institution-wide, organized program to review the effectiveness of the management information system, and improvement and review occurred when deficiencies were discovered; for example, insufficient data elements in the file. It was noted that systems review was a direct responsibility of the data center staff. Their jobs gave them a responsibility to at least identify areas of deficiencies, which might be solved by them or another department.

Systems Manuals, Job Descriptions, and Linear Responsibility Charts

The fiscal officer indicated that the college had a philosophy of documentation that pervaded the institution. Staff turnover is a fact of life and it must be better accepted

and planned for. Flowcharting each person's job was a program in progress of development. It was felt that this could best be achieved, maintained, and kept current by incorporating it into the college's data files at the data center. This also gave it greater accessibility to management in other areas of the college.

Management Audit, In-House Management Development, and Training Program, and Individual Professional Development Plans for Management

Each department was required to have professional development plans. The fiscal officer felt that often the college objectives (for that year) pre-determined or dictated the nature of professional development for management in a particular area. The management audit program and professional development programs were also incorporated in the MBO program at the college. Under this program, management was required to outline certain objectives that were to be achieved. Three times a year, these objectives were reviewed by the president while meeting with individual management personnel. This was part of the management evaluation program conducted by the president.

Formal Institutional Development Plan

College A felt that all colleges needed a formal institutional development plan, incorporating the institution's mission, along with a formal structure for reviewing it at least once a year. It has a five-year plan and was using MBO to achieve it and to evaluate progress toward it yearly.

The president was an avid MBO supporter.

Formal Institutional Marketing Plan

One person was responsible for the institution-wide marketing effort. The major advantage was seen as coordination. It was noted that this worked only if the individual was capable. Even though this person reported directly to the president, it was often that the president sought marketing information from other persons in order to maintain a diverse profile within his information flow. The marketing plan was constantly updated.

Idea-Lab

An idea-lab is a structured management-supported forum for the interchange and analysis of idea/innovations. College A had two three-day retreats in which all management personnel brought ideas submitted to them, new forms, or policies they wished adopted or addressed themselves to problems they saw in other departments. In addition, the president had weekly cabinet meetings. The retreat and cabinet meetings concentrated on looking for symptoms of problems. Institution-wide problems such as student retention were discussed and institution-wide solutions formulated. These meetings also presented a real opportunity for some degree of participatory management.

Organized Means for Receiving Feedback on College Operations from the College Constituency

The president of the college appointed a committee consisting of key persons from the community and representing

a profile of the community. These got together and informally discussed how these people felt the college was relating to the community and satisfying the needs of the community. In some academic areas, the president of College A appointed an advisor. This person was invited to render views regarding the community and the profession's view of that academic area, and also render ideas that helped keep it abreast of the field. For example, the advisor to the data processing division might advise the director of this area on items such as the following: What is happening in data processing that College A should respond to? Does College A's graduate supply the skills the profession is needing? Should College A be rendering data processing services to some high schools?

It was worthy of note that these appointed individuals were volunteers and not on any payroll.

Cost Analysis System

Cost of programs varied greatly from academic area to academic area. Productivities also varied department to department. Even though attempts are always made to look at cost-effectiveness of programs, a cost analysis program did not exist, but was under development for the following year. The fiscal officer questioned the value of a cost analysis system sophisticated enough to allow purchasing staff to make cost comparisons on a day-by-day basis when performing their routine purchasing functions. This refers to being able to tell what was paid for an item the last few times it was purchased by pressing a button. The fiscal

officer questioned the value (cost versus benefits) of such comparisons, given demand and supply in the marketplace and also inflation.

Summary of Overall Discussions and Expressed Views of Chief Fiscal Officer

A very important key to institutional growth was to have top management, as led by the institution's chief executive, responsible to good management practices--not in philosophy, but in fact. Management success came about by combining the four Ms: money, manpower, method, and machine. The chief fiscal officer, using financial variables and the power present in the budget, could be an effective change agent, the good management procedures being a catalyst to producing positive change in the college.

The chief emphasis of all phases of campus operations must be the student. Each staff, administrator, maintenance person, janitor, etc., must know and act as if the college existed to benefit the student. The president must also be able to manage all of the people in his institution, being able to deal with basic employee traits such as job insecurity. The management skills should also effectively manage human resources, instilling trust and worthwhileness within the people and generating a willingness to work toward achieving the mission of the college.

To summarize, the chief fiscal officer appeared to place high priority in planning and achieving pre-set objectives using MBO and the budget. Information was vital since all colleges needed good information for management decisions.

A responsive president was required, one who possessed the skill of communicating with his organization in as total a way as practical, one who was constantly in touch with all administrators and aware of the issues, problems, and development in the college at all times. A strong hand on the purse strings was also needed and was present in College A.

College B

College B is a small, private independent-religious, four-year coeducational college with enrollment around 600. The college offers a wide liberal arts program and also Biblical studies, Biblical languages, and Christian education. The college has grown from approximately 400 students around 1973 to an enrollment of around 600 in 1980. Total present faculty is approximately thirty full-time members.

The college sensed a need for operating in a more predictable fashion, and this began an emphasis on planning and designing operations such that they were in accordance with the overall institutional plan of operation and development. This program was led by a fiscal officer (second highest fiscal office) whose prior work experience was in private industry. The result of this approach was the initiation of various management techniques and practices in the institution, along with a steady annual growth pattern.

Management Information System for Overall Operations, Planning and Budgeting and Accounting

College B did not have a data-based management information system that coordinated its overall operations. Information systems of four types existed:

1. IBM office management system 6 (used in admissions
2. Time sharing with a state university (used in the development office)
3. Several micro computers in various offices
4. Mechanical system in the business office (a Monroe office machine)

College B indicated that studies were presently being conducted in order to determine the proper hardware and software that could be purchased. The fiscal officer felt, however, that up to an enrollment of around 600 students, an information system that coordinated overall operations was not necessary, and separate systems that served the needs of various departments were adequate for the institution, considering cost and benefits. The 700- to 800-student range was the crossover point where the need for an overall management system became acute. The desire for a single system also stemmed from the desire to consolidate all of the individual systems into a single centralized system in order to cater to the needs now being satisfied by the various scattered systems. The need for good management information was noted as an important need. No formal institution-wide review was regularly made of these systems to determine the

extent of their effectiveness and shortcomings.

Systems Manuals, Job Descriptions, and Linear Responsibility Charts

These were required, kept in central personnel files, and regularly updated. Jobs were flowcharted and manuals kept in each operating area of the college. The updating process was annual. Job changes were also reflected on them at this time.

Formal Institutional Development Plan

Institutional planning was conducted yearly and on a three-year overall cycle. This institutional planning model was in a manual, showing what objectives were to be achieved by which department each month. Input into this plan was forwarded by the faculty organization and also the college's administrative council, made up mainly of the president, faculty, staff representative, community representative, and student representative. This plan, which was in manual form, incorporated the external and internal assumptions of the college, the environmental constraints, objectives, strategies for their achievements, financial constraints, etc. The mission of the college was basically to provide a college education in a Christian environment.

Management Audit, In-House Management Development, and Training

The fiscal officer felt that a need for management audit, in-house management development and training, and

individual professional development plans for management was present, but for this institution, faculty development received the major concern and emphasis. Seminars for deans, directors, etc., were incorporated into their departments' budgets. A need was expressed for College B to conduct periodic training sessions for office-type staff. Even maintenancemen needed to be aware of the extent to which their activities influenced and enhanced student recruitment and retention.

Formal Institutional Marketing Plan

The vice president now in charge of development was charged with the responsibility of reviewing and coordinating the total formal marketing effort. The fiscal officer saw great merit in having a person void of any direct marketing responsibility to any one office and indicated a need in the institution for review of this current structure. The fiscal officer supported the belief that there was great merit to having a single person delegated with the ultimate responsibility to coordinate the entire institution's marketing effort.

Idea-Lab

The fiscal officer felt that the majority of ideas for improvement came from current students who were the consumers. Students sat on each committee of the college, excluding the executive council. In the forum presented by these committees, ideas were generated and analyzed.

Organized Means for Receiving Feedback on College Operations from the College Constituency

The college recruited students from almost forty states, thus the fiscal officer had some degree of difficulty in defining who the college constituency really was. Feedback was necessary and was obtained from areas such as: (1) surveys, (2) new students, (3) current students, (4) parents, (5) the college magazine and weekly schedule mailed to parents and often with spaces left for comments, and (6) dorm supervisors. Of interest was the fact that an aggressive and formal effort was made with new students in the first few early days of campus in order to find out how they actually came to learn about the college and the nature of the information which was transmitted to them.

Cost Analysis System

The fiscal officer felt that inflation brought a "cost sensitivity" to most, if not all, colleges. With a degree of effort, it was easy to calculate and maintain various important costs around the institution; for example, the cost of programs. This was the extent of the cost analysis system here.

Summary of Overall Discussions and Expressed Views of Chief Fiscal Officer

Through the fiscal officer, a large amount of effort was placed on institutional planning. Little or no emphasis was indicated with regard to the president's direct and vigorous involvement in the management programs. The fiscal officer seemed to be aware of the many ways in which the

marketing process occurred in his institution. He was acutely aware of the challenges facing small, private Christian colleges and a pressing need for all such colleges to become more involved in their own survival.

College C

College C is a small, coeducational, private church-related college. More than 80 percent of its students are drawn from this membership. The fall 1979 enrollment was around 800 students. The college awards Bachelor of Arts and Bachelor of Science degrees in some twenty areas including Bible and Christian education. Around fifty full-time instructors taught at College C. The college is in a very rural area; almost 100 percent of its students live on campus. Enrollment was almost identical in the fall semesters of 1977, 1978, and 1979. The chief fiscal officer's prior work experience was in private industry in a lower middle-management supervisory position. Policies and procedures at the institution were largely viewed as being a reason the institution was growing and enrollment remaining stable.

Management Information System for Overall Operations, Planning and Budgeting and Accounting

The college's management information system revolved primarily around the institutional budget, produced, updated, and published as part of the regular accounting process. The Burroughs L-85 accounting machine was used in the accounting office. The budget was prepared with input from all around the college. The budget prepared June 1 was revised on

September 1 after the fall class was in. The fiscal officer felt that a good accounting system should be able to account for contingency payments; that is, once a purchase order representing a department expenditure was approved, these committed funds should become a part of accounting records, long before invoicing and billing to departments. This was also reflected in monthly departmental budget printouts. This was viewed as a part of the budget control process.

There was no data-based management information system for overall operations in this college. The chief fiscal officer felt that an institution would probably have to be enrolling in excess of 5,000 students in order to economically benefit from such an in-house system. It was noted, however, that Financial Aid utilized an IBM 5101 microcomputer. The chief fiscal officer appeared to feel that for a college of this size, information for management decision-making was readily accessible without the use of any additional electronic systems.

Formal Institutional Development Plan

College C has a ten-year plan, revised and updated yearly, and reviewed by the Board of Trustees at the annual meeting. Afterwards, and through communication with the president, each administrative department head (academic not included) submitted a communication to the president that described how that office would achieve or update its portion of the ten-year plan. When this was regarded as acceptable to the president, the final product was printed and returned

to that department.

Systems Manuals, Job Descriptions, and Linear Responsibility Charts

There was no institutional requirement for these. Whether in academic or non-academic areas, job descriptions were not written. They were simply communicated to employees upon employment. There were no systems manuals with flow-charted listing of functions that supported individual job descriptions. The chief fiscal officer saw some merit in these to some extent, and indicated that written job descriptions were kept sometime in the past.

Management Audit, In-House Management Development, and Training Programs and Individual Professional Development Plans for Management

The chief fiscal officer felt that professional associations to which middle-management personnel belonged adequately provided professional development and management education for College C. He felt an in-house program was unnecessary. After a seminar, most individuals wrote a report for his or her department head. This report was often routed to other departments. Persons returning from sabbaticals wrote a report (in manual form) and a formal report was given to the entire faculty and administration of the college in a special dinner meeting called by the president. Any administrator or faculty member with seven years of employment at College C qualified for sabbatical.

Formal Institutional Marketing Plan

The college did not have a formal institutional marketing plan. The director of communication and information performed marketing for the college and operated separately, using his department's budget. This department, along with others such as admissions and development, performed their marketing activities as best suited the objectives the department was being called upon to fulfill. The special needs of College C as a church-related college warranted a staff position designated Director of Church Relations. Such a person traveled constantly to supporting churches promoting good will. This person simply reported to the president. No formal structure or process brought together the president, the director of church relations, the director of communications and information, and the director of all other departments formally performing marketing functions, in order to direct and receive market research, determine overall marketing objectives, and coordinate and develop new strategies for a "total" institutional marketing effort.

Idea-lab

Regular meetings are held by the administration and some of the meetings are brainstorming sessions. Ideas are generated and problem-solving structures created to analyze their worth. Each year, the graduating class elects a member to the previously mentioned board of advisors. Students from the student council sit on various committees, including some faculty committees. The chief fiscal officer

also felt that even the meeting minutes of the students' own regular council meetings often provide very useful and imaginative ideas.

Organized Means for Receiving Feedback on College Operations from the College Constituency

Each church within the affiliate supporting church membership which contributed a number of thousands of dollars in a particular year to College C received the opportunity of electing a member to the board of advisors, which met the same time as the board of trustees. This provided direct feedback from the local churches. Otherwise, feedback was obtained from parents, alumni, and friends by regularly mailing college publications to them.

Summary of Overall Discussions and Expressed Views of Chief Fiscal Officer

The chief fiscal officer felt that management in church-related colleges tended to have a more special people-consciousness, or a greater interest in the students themselves and their development. Good management procedures were very important to institutional growth and development. The discussions seemed to suggest, however, that College C would grow anyway as long as College C maintained a certain climate on campus and a certain degree of approval from the supporting church membership. Therefore, it appeared that more effort was exerted in these areas than in most others discussed. The importance of the budget was again stressed. The number of management practices policies and procedures which were being informally performed was viewed by the chief

fiscal officer as being a direct result of the college's small size.

Summary of Studies with Exemplar Colleges

The three colleges visited were selected because they clearly showed a wide use of management practices compared to others in their enrollment class and college type. It is a logical and permissible assumption to make that where a particular management practice was not operating, most, if not all, similar colleges did not have the practice operating. For example, six out of the thirty-two reporting private colleges in the state indicated they did not have systems manuals, where individual jobs were described (job descriptions) and major functions on the job descriptions flowcharted. One of the private colleges visited did not have these manuals or a requirement for written job descriptions. It was logical to assume that where a management practice was inoperable in one of the colleges chosen, it did not operate in all or most similar colleges reporting.

Each practice included in the checklist generated meaningful discussion in the interview, thus helping to confirm that these practices selected for the checklist were relevant pressing concerns and actually usable. Very few additional useful management practices were added by the fiscal officers interviewed.

It was interesting to note that the backgrounds of each of the fiscal officers interviewed were private industry. It would appear that this had an impact on the

policies and procedures operating in the institution.

With respect to management information systems, all of the fiscal officers, being aware of the budgeting and accounting usefulness of a management information system, were convinced they could not operate without. Having never worked in a college where a system that connected the overall college and incorporated the college's short-range institutional plan existed, two fiscal officers seemed to feel that for their size, their concept of the cost could not justify the benefits they could perceive.

Fiscal officers regarded job descriptions and documented job functions all placed in a manual as a way of life. Systems manuals were indispensible, given the reality of staff turnover possibilities. One was convinced of their usefulness but his college required none.

Regarding the formal institutional development plan, all colleges had one: a five-year plan, a three-year plan, and a ten-year plan, each with an annual updating and evaluating process. The differences came in the amount of input allowed into the plan from the total college community and whether the entire plan manual was available or accessible to all management personnel and others.

Each college recognized that the college administration had no monopoly on good ideas for college development, and indicated some committee or meeting forum through which the persons represented could submit ideas for evaluation. None of the colleges had a structure supported by the president himself created for the sole purpose of receiving ideas

submitted from anyone or anywhere on campus (identified or anonymous); reviewing them, making a report on each one deemed to have merit; and identifying and/or compensating the individual for contributing this idea. Such an idea flow does not have to be restricted to channels such as supervisors, committees, department heads, or student leaders.

Each college recognized the need for feedback on college operations and had formal channels operating. Each contributed at least one creative feedback process advantageously in use in their institution.

A management audit had never been performed in any of the colleges visited and professional development and management education was left up to the private individual associations to which individuals belonged. None of these colleges had a mandatory requirement for reporting information gained in these seminars after attending them. No requirement for professional development plans from managers were found in two of the colleges.

Only one of the colleges visited had an overall, written, and formal institutional marketing plan, along with someone (without marketing responsibilities to any one office) designated with the responsibility of ascertaining that the college's total market effort was being achieved.

Each fiscal officer testified of the need to control costs in inflationary times. They used no organized procedure to do this, apart from the fiscal constraints presented by the budgets.

Finally, each fiscal officer reflected on his total role as a manager, but appeared to be oriented toward balancing the budget and controlling the purse strings.

Analysis of Data from Exemplar Colleges

After viewing the total scope of the data from the interviewing, a number of important facts became apparent. Sixteen of these are listed, and discussion of some areas appears in Chapter IV.

1. Each practice included in the checklist generated meaningful discussion, helping to confirm the relevance of each management practice selected for testing.

2. Individuals could not differentiate very clearly between a job description and its nature, scope, purposes and functions; a systems manual and its nature, scope, purposes, and functions; and a linear management responsibility guide and its nature, scope, purposes, and functions. A flow chart was once described and discussed as an organizational chart.

3. Institutional planning was done but the annual updating of the development plan did not incorporate input from as wide a cross-section of the college community as possible.

4. Many ideas for the development and improvement of the institution probably never left the minds they originated in, since they were not actively solicited and systematically received, analyzed, and rewarded. Such processes are very common in private industry.

5. In-house management development programs received no priority. This applied also for training programs for lower-level staff such as office workers.

6. The importance of a formal institutional development plan appeared to be present in each of the colleges visited.

7. Each college through their procedures recognized the need for formal channels in order to receive feedback in the college's operations from the college constituency.

8. In these colleges, the management education and management development were performed totally by outside professional organizations.

9. The importance of marketing was well grasped in the institutions, but marketing management appeared to be lacking in two colleges.

10. Professional development plans, as a requirement for management, did not exist in two colleges.

11. Measures to study and control costs had not been undertaken on a formal basis.

12. When the president led the initiative by being responsive to good management practices, the management process appeared to be more defined and aggressive.

13. The fiscal officers all appeared to believe that the "M" in management represented "money." Thus, an enormous amount of attention was devoted to the budget and the budgeting process.

14. Individuals appeared to be frightened off by the use of terms such as "system" or "scientific management,"

perhaps reflecting on their exposure to the literature and to articles being produced enmasse almost daily.

15. Individuals hid under the cloak of being in a "small college," thus failing to investigate the importance and relevance of various management techniques and practices that might possibly assist in their management tasks.

16. Fiscal officers in these colleges selected had backgrounds from private industry.

The data and the analysis of them in this chapter have brought various interesting facts to light. Chapter IV will look at these facts in order to outline the lessons which were learned from the data and what the data really meant.

Analyzing the data in this chapter revealed various findings. These findings helped to assess and determine the applicability of these selected scientific management techniques to the administration of small, private church-related colleges.

CHAPTER IV

SUMMARY, FINDINGS, AND CONCLUSION

The summary of this study describes in a precise fashion what the study basically was, its design, and its conclusions. The conclusion outlines the knowledge the researcher gained from the study and describes the researcher's analyses, deductions, conclusions, and recommendations. The final section of recommendations cites two studies that might be pursued that would continue to build upon the information gained as a result of this study.

Summary

The changing years have brought with them changing realities in college administration. Management strategies, tools, and techniques, previously repulsive to college administrators, were being adapted and adopted to assist in the task of managing colleges and universities. At the outset of this study, it appeared that useful management techniques, such as many of those employed in businesses (particularly small businesses) had not found widespread use in small colleges. In fact, it appeared that most small, private church-related colleges were not operating using modern and scientific management techniques and practices, and the management process appeared to be unsophisticated and ad libitum. For colleges, it was expected that the environment

of the 1980s would be characterized by factors such as scarce resources, multifarious demands from society and other constraints. This appeared to challenge college administrators in small, private church-related colleges to become increasingly management-oriented since the process of management helped colleges to achieve their goals through more effective operations

The purpose of this research study was to report on the extent of management's use of and experience with various modern management techniques and practices in selected small, private church-related colleges. Several management techniques and practices finding profitable use in the managing of small business organizations and higher education institutions were identified, using not only literature review and studies, but reviewing the content of management seminars and the programs of various organizations devoted to producing and applying techniques to assist in managing higher education institutions. The State of Tennessee was regarded as a "typical state" and a listing was made of all eighty-three degree-granting higher education institutions. A checklist was constructed with those management techniques selected and sent to the chief fiscal officer in each of these Tennessee institutions.

By also viewing the extent of the use and experience with these management practices in selected public colleges and universities, the study could also assess the applicability of the management tools to assist in managing small private church-related colleges. Certain responses viewed as representing exemplar colleges were selected and those

colleges were visited.

In developing the questionnaire, the traditional management functions of planning, organizing, staffing, leading, evaluating, and developing were used as a framework, and a number of scientific management techniques and practices were selected under each one of these functional categories. Spaces were left beside each item for the respondent's comments. Visiting the colleges viewed as exemplar colleges was done with the intent of determining the effect of certain of these management techniques and practices as they found use in certain college settings, thus developing useful knowledge concerning the potential and applicability of these to assist in the administration of the small, private church-related colleges.

The findings from the survey results illustrated various major discoveries. The item drawing the largest amount of total responses was the management information system for budgeting and/or accounting and/or planning. Other areas ranking high were formal institutional development plans and also established channels for receiving feedback on college operations from the college constituency. The survey showed that among reporting colleges, the least amount of attention appeared to have been placed in areas such as monitoring employee motivation, frameworks to receive and analyze ideas from the college community, using written interview guides, in-house management development and training programs, developing and using systems manuals, requiring professional development plans for management, time management

programs, formal institutional marketing plans encompassing all major phases of the institution and structures for achieving team objectives.

The results of the college visits supplied a great deal of information that assisted in understanding and interpreting responses given on the checklist. The involvement in and the responsiveness of the institution's chief executive to good management practices was found to have a great impact on the management practices and procedures being effectively used in the colleges. It was found that the fiscal officers were most effective when they could view their role as managers, rather than being financial technicians. Scientific management techniques were applicable for the administration of small, private church-related colleges, and all techniques included in the checklist/questionnaire were found to have usefulness in the management process of small, private church-related colleges.

The sum total of all of the aspects of the study led to the development of nine pitfalls in managing the small, private church-related college, along with brief suggestions as to what could be done about each of the pitfalls through the application of various appropriate scientific management techniques, found to be in use in some of the Tennessee colleges and universities. These appear in the study's conclusion.

Findings

There were fiscal officers operating small church-related colleges who had never even heard of concepts such as some of those listed on the checklist. This fact became apparent as checklists began to be returned. In some cases, responses and explanations indicated a clear lack of comprehension of the practice being discussed. In other cases, there was an outright admission that checklists could not be completed due to lack of sufficient knowledge about the contents. It appeared that at the beginning of the decade of the 1980s, there were small, private colleges being managed by what might be referred to as "glorified clerks."

Apart from business office accounting equipment, most private colleges responding to this checklist had no other system of management information. It was largely agreed that the quality of management decision-making bears a direct relationship to the nature of management information available. All colleges need good information in order to operate efficiently, and this information involves more than financial information.

Management responsibility guides (or linear responsibility charts) were finding little use in most colleges responding. Despite high response rates on the checklists, interview data confirmed that these results were largely erroneous since this very useful management technique was unfamiliar to many. Management responsibility guides help to solve very sensitive relationship problems by indicating the nature and degree of the responsibility for

various functions that various management personnel or departments have. Thus, for large colleges such a tool is necessary in each department, being updated regularly due to the constantly changing nature of the college management setting.

Most small colleges leave management development and training to outside professional agencies. Most had no management audit at any time, no in-house management development and training program, or requirement for professional development plans. Even when seminars were attended, most colleges had no formal or required procedure whereby information could be shared with others in their department or in other departments. Since this raised the possibility of various individuals from the same college attending the same seminar, it followed that many colleges were not fully utilizing the amounts being spent for professional development of management personnel.

Most reporting colleges did not feel a need to have systems manuals in the departments according to data reported. Since it was discovered that at least one college communicated job descriptions orally upon employment, even though job descriptions were eliminated from items chosen for the checklist, it appeared that there were colleges operating without any written job descriptions for staff at all.

The majority of colleges reporting had institutional development plans. Some of these were called five-, ten, three-, seven-, or fifteen-year plans. On the surface, this

appeared impressive, but of greater interest was the cross-section of input into these plans at the time they were updated. It appeared that there were institutional development plans directed toward achieving objectives that were no longer critical to the college's development or had shifted in priority. Small, private church-related colleges that had no formal institutional development plans were probably not growing and developing or else doing so sporadically.

The majority of colleges realized that their survival in some ways depended upon the existence of active feedback channels. The majority of responding colleges therefore had constructed organized means for receiving feedback on the college's operations from the college constituency. This did not apply to reporting church-related colleges. Only a few of the latter reported the existence of formal organized means for receiving feedback on college operations.

In the later years of the 1970s, marketing tools and techniques received increased attention by college managers, particularly admissions officers and development officers. This study found, however, that only a small number of colleges were involved in marketing management to the extent that they had a written and organized overall institutional marketing plan that encompassed all major phases of the institution. On the other hand, around 50 percent of the reporting colleges saw merit in having the overall college or university marketing activities managed by one specific person on the vice-president level.

Various other management practices studied had one

thing in common: they all were used very little by reporting colleges. They were:

1. Idea labs
2. Team building frameworks to achieve a team objective
3. Interview guides
4. Programs promoting management time management
5. Employee motivation and educational productivity management programs

The career backgrounds of the fiscal officers directly influenced the amount of good management procedures in the college. However, the president led the initiative by himself being responsive to good management practices and consciously creating the climate in which other administrators were motivated toward increasing their management expertise. For example, it was found that in colleges using MBO where administrators knew they would sit with the president once or twice a year to set and review their objectives and development, this gave them a constant consciousness to their own development but also to the development of the management processes in their departments. Good management practices contributed to goal achievement.

Finally, it was found that administrators, including a few fiscal officers, still did not appear to be convinced that various scientific management practices in their institutions would produce any improvements. These were still not comfortable with or agreeable to using management terminology. However, judging from requests by respondents for copies of

the study results, a majority of the respondents desired information that could help them to perform the management tasks in their institutions.

The findings showed that each management practice selected for testing was useful inasmuch as they were being used beneficially and to some extent. Since it was determined that these management practices were useful and applicable to aid in the management task of the small, private church-related colleges, practical suggestions and recommendations are presented concerning these and other scientific management practices.

Conclusions

Over the years, the uniqueness with which educational institutions have been viewed has been somewhat altered, and management strategies pursued in the business world have been successfully adopted or adapted for use in colleges and universities. Much speculation has been made as to the extent of the use and the applicability of scientific management techniques to assist in the task of managing small colleges. This research study set out to point out to top and middle management of the small, private church-related colleges the extent of management's use of and experience with various modern management techniques and practices in institutions similar to their own and in other colleges and universities.

Small, private church-related colleges needed to become more energetically involved in the task of improving their management expertise in order to face the pressures of

the twentieth century's societal demands and environmental constraints. Scientific management techniques/practices, properly used where appropriate, presented possible opportunities for these colleges. The research demonstrated that there were small, private church-related colleges operating without the use of many of the basic management tools. The research and the interviews with management in private church-related and non-private, church-related colleges led to a formulation of nine pitfalls in managing the small, private church-related college.

If administrators in small, private church-related colleges could look ahead and see the pitfalls that could cause failures in various aspects of their colleges and universities, these trouble spots could easily be avoided. Pitfalls, or the spots where some may stumble, at the very least therefore, may give an idea or two to college administrators which may result in better management. If that future aim is achieved, then the development and recital of the following pitfalls was certainly worthwhile. Valuable lessons can be learned from those who have faced the pitfalls and who already know how to avoid them. College administrators in small, private church-related colleges may not avoid all pitfalls, but by knowing them and looking ahead, many may be minimized.

The latter portion of the description of each pitfall below suggests what may be done about them through the application of various scientific management techniques.

Lack of Information Flow and Personal Interaction Among Top Administrators of Similar Colleges

A good number of small, private church-related colleges were organized in order to perform a certain specific function primarily or exclusively for their membership clientele. This often affected both the perspectives and the professionalism of their management. In many of these colleges, there was a tendency to maintain a steady state or maintain a status quo in development and expansion. Certain church appropriations were somewhat guaranteed. The institution's size and development received no complaints from the affiliate church membership and the chief executive officer often felt secure in his position due to a reasonably certain tenure. The conflict brought on by the average president having to cater to multiple constituencies was not present for the most part. The separatism and elitism that permeated the religious aspect of the college often spilled over into professional life, such that administrators did not form meaningful or informal associations nationally, regionally, or locally for common good. Therefore, interaction among top administrators of similar small, private church-related colleges was often at a minimum, and so was information flow and the sharing of common problem-solving ideas, issues, and management strategies for institutional and professional development.

Whether anything can be done about this depends on the initiatives of individual managers and also upon the leadership and boards of various denominations becoming more aware of the challenges facing colleges in the 1980s, and thus

demanding maximum value from their educational dollars. The obligation for adequate stewardship is equally incumbent upon those managers in small, private church-related colleges who take pride in pointing out that they receive no direct financial support from the denomination to which they subscribe. Much can be gained by greater interaction by top administrators of these colleges among their colleagues in their locale and in the society at large, but particularly among top administrators of similar colleges.

The higher education environment is characterized by an increasingly regulated society, and small private higher education is increasingly dependent upon government policies and programs for its sustenance. On the other hand, the government is also dependent upon the small, private higher education for the assist in the formation of public policies that preserve diversity, choice, quality academic programs, and innovation in our society. Small, private church-related college administrators should feel a direct obligation to actively and visibly support all associations whose aims are to influence public policy on behalf of small, private higher education.

No Structure for the College Community to Contribute Problem-Solving Ideas

Many ideas for campus improvements, for curing trouble spots, for increasing efficiency, for increasing student satisfaction, for improving student services, or for cutting costs and raising new revenues can come from all areas of the college, and not just from college administrators

and supervisors. In fact, it must be realized that the latter have no monopoly on such ideas. Even though this is a rather obvious fact, few colleges have paid enough attention to it to prompt them to create the necessary structures in order to make use of this resource. There must be formal channels operating year-round, through which ideas from all sectors of the college community may be solicited, funnelled, and evaluated for merit. People must be able to know that ideas submitted will be seriously and formally considered, and that they will receive feedback and/or recognition and/or rewards for such contributions to the good of the institution.

Various things can be done about avoiding this pitfall. The idea lab or "institutional think-tank" that exists in various colleges takes on a variety of structures. In some instances, it takes the form of a president's forum of college officers who meet regularly, simply to think and brainstorm about issues or solutions to institution-wide problems or in particular areas. Ideas submitted from all areas of the college reach this forum. Otherwise, such a president's forum might consist primarily or totally of students who meet regularly for the same purpose. The same concept may be extended to all college departments and to physical plant and auxiliary enterprise directors. Benefits to be gained by all areas add up to a substantial positive plus for the small, private church-related college.

Lack of Motivation and Productivity Consciousness at all Levels

Recent years have brought a sensitivity to employee motivation out of the industrial realm into the collegial halls. Being concerned about motivation and productivity is at the very heart of the need to maximize scarce resources. This sensitivity and concern should come first and foremost from management.

Educational productivity has become more than merely a concern in recent years. In many instances, dollars spent for education have increased, while student enrollments have leveled off or decreased. If the importance of educational productivity bears any similarity to its counterpart in industry, then it may also be true that without increased productivity, there will be no growth. Many people believe that the concept of productivity is just as valid in education as it is in the production of goods and food, even though the challenge of its measurement in educational institutions might be a more severe problem.

The National Center for Higher Education Management Systems has spent hundreds of thousands of dollars in the first half of the 1970s to develop ways in which the benefits or outcomes of post-secondary education can be quantified. More and more variables that define and measure educational productivity have been quantified.

Addressing this pitfall necessitates a consciousness to motivation and productivity at all levels. Individuals who succeed in making productivity gains should be given

recognition and should realize the advantages of advancement and increased pay through job performance. The micro approach to productivity improvement emphasizes that only through examining the separate functions of the college and also their interrelationships can improvement be made most directly. This micro view also makes the above applicable to the small, private church-related colleges.

Fragmented Institutional Marketing

Some marketing is performed in all areas of the college or university. Applying marketing and marketing research methodologies in colleges is now prevalent. However, advertising, public relations, market research, new product (program) development are often all being accomplished in different areas by different people for different reasons and not coordinated as a part of one total effort.

Without a coordinated whole, some aspects of the marketing program are bound to be neglected or omitted while others are emphasized. For example, allocating more funds in the admissions budget for programming to increase student retention rates may well be an important part of an overall institutional market plan, but a not-so-high item on the admissions office's priorities for expenditures. In another area, it may be a one-time strategy of the college to devote certain expenditures in order to devise creative ways of approaching alumni and other private donors for fund-raising through public relations methods. More than one area can work to achieve this. A fragmented institutional marketing

strategy is undesirable if scarce resources are to be used optimally.

Avoiding this pitfall in many cases will necessitate having one individual at vice-president level responsible for coordinating the overall institutional marketing effort. This coordination and integration is vital if the small, private church-related college is to survive the stresses and strains of the competitive market environment of the troubled 1980s. This would hardly impair the budgeting systems of the various areas that include some aspects of college marketing. This would only ensure that the marketing activities in all departments contribute to an overall composite president-approved plan. The institutional marketing approach removes the "division or department emphasis" from the college marketing.

Absence of Systems Manuals in All Areas of the College

Employees leave their jobs frequently and their replacements are usually presented with a job description from a file that is usually obsolete. Other times, employees fall sick or are handicapped in some way and in many cases, their replacement has only a job description along with hasty instructions from already-busy staff members. Without a manual giving written and flowcharted step-by-step procedures for the performance of various tasks, much time and money is lost during staff transitions. In addition, in all colleges with enrollments above 300 and total staff over twenty, from time to time there is always a question

among officers at all levels and supervisors concerning who should do what, who must be consulted, who must approve an item or who is generally or specifically responsible for a function or the carrying out of a policy. The symptoms of this might be employee frustrations or conflicts in the job place, but the end result is loss of efficiency and money.

This pitfall can be eliminated first by differentiating very clearly between a job description, its purposes, functions, and usefulness, or systems manual, its purposes, functions, and usefulness, and a linear arrangement responsibility guide, and its purposes, functions, and usefulness. After clearly differentiating between the nature, scope, and limitations of each management tool, each one should be implemented in all departments. Employees cannot be expected to function clearly without clear guidelines.

Resources Devoted to Professional Seminars Not Used as Efficiently as Possible

Across the institution, quite a significant sum is spent on professional seminars. Seminars are abundant and are designed to suit everyone's taste, budget, location, and schedule. As long as significant amounts are being expended in these purchases, maximum value should be obtained, not only for the seminar participant but for all management areas. Resources used in this way should produce maximum returns for the college.

Eliminating or addressing this pitfall would mean having a structure so that seminar content is shared by the participant upon his/her return. Each person attending a

professional seminar might be required to submit a report in a stated format and of a suggested length to the college and administrators in other areas, as designated by the president or vice presidents. The small, private church-related college thereby receives additional value for the investment in professional seminars.

Uneconomic Decisions Unrelated to Cost Analyses and Comparisons

Many colleges at the start of the decade of the 1980s had perceived future problems within their major revenue categories such as federal appropriations, private gifts, state appropriations, and enrollment-determined areas such as the tuition categories. These problems, joined by inflation and declining productivity in the colleges, have caught the institution in a cost-income squeeze, likely to be more detrimental than the future prospects of enrollment declines. The need for greater cost-consciousness in order to conserve resources is a pressing need.

Cost consciousness is seldom overlooked when the securing of large items is in question. Cost consciousness of the routine items in the daily course of activity and marginal cost evaluating or cost-benefit analysis are more apt to be overlooked, especially in the absence of an ongoing system designed to produce any such information.

The way a small college avoids this pitfall is to become cost conscious. Less autonomy might be granted to those empowered with the purchasing mandate so that cost checks become a necessary and mandatory part of the purchasing

privilege. All decisions to commit institutional funds, however routine, must be economic decisions.

Inadequate Institution-Wide Planning

Planning is that process that systematically develops and charts the long-range development of the college. Adopting a "total approach" to institutional planning is the best strategy for achieving the full benefits of the planning process. Various management models, applicable to the small, private church-related college, are designed to systematize institution-wide planning.

Inflation promises to be an example of one of the tough problems for which small colleges must plan. Many campuses will be unable to match price increases with comparable revenue increases. For those campuses that cannot increase tuition revenues significantly, the quality of education programs may simply decline. Many small, private colleges derive 60 to 65 percent of their current fund revenues from student charges, according to HEGIS data.[1] Can these institutions risk adopting a financing strategy that causes them to rely even more heavily on student charges with any realistic prospects for significant success in the 1980s? It appears that increases in student charges on the average will simply not keep pace with increases in current fund requirements.

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[1]National Institute of Independent Colleges and Universities, Independent Higher Education and Government Issues for the 1980s (Washington, D.C.: National Institute of Independent Colleges and Universities, 1980), p. 2.

There other examples of tough problems, such as new student markets, faculty development, curriculum development and innovation, retrenchments, and the constraints of public policy and regulations. Avoiding this pitfall will necessitate adopting a systematic approach to institutional planning. Such an approach must touch all facets of the institution with methods of ascertaining that short-range objectives are being achieved in accordance with the long-range goals.

Lack of an Information System for the Overall Operations of the College

Small colleges are facing an increasingly difficult era. Compounding the severe financial problems are inadequate planning and management processes and techniques and insufficient data upon which to base decisions.[1]

Precise and accurate information is critical for efficient decision-making. As a college grows above 500 students, the need for relevant and timely information becomes more acute. With this has come the development of systems in the MIS sense suitable for use in small colleges. Small, private church-related colleges should be giving attention to implementation of MIS for overall operations in their institution, as well as being an integral part of their institutional development program.

There are various possibilities for eliminating this pitfall. The first concern is cost. Small colleges

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[1] Systems Approach to College Administration and Planning, ERIC Document ED134 097 (Washington, D.C.: n.p., 1975), p. 95.

might consider regional consortium arrangements where computer time can be purchased and on-campus terminals rented. Otherwise, there are possibilities for operations or systems that do not require a computerized data base or depend upon electronic technology. Various agencies are now disseminating information on small college information systems for overall operations.

Small, private church-related colleges that heed these pitfalls will increase the sophistication of their management, while maximizing the use of the institution's scarce resources.

Recommendations

There are studies that could be conducted that would continue to build upon the knowledge gained in this study. Some are as follows:

1. Expanded study of exemplar colleges, both in the State of Tennessee and in other states. The number of colleges visited and the time devoted to studying them could be greatly expanded, making a case study research study. Weeks and even months could be spent studying each aspect that a management technique or practice impacts at exemplar colleges. An even deeper understanding might be achieved concerning the applicability of these scientific management practices to small, private church-related colleges. If the study was conducted in other states, colleges with significant geographic diversity might also be included.

2. Studies in more efficient organization charts

among small colleges. Viewing any directory of colleges and their administration is amazing because the organization chart varies, college to college. Many colleges appear to enjoy a "mix-your-own sundae" type of organization. A visit to many colleges reveals even more diverse span of duties and subordinates under the titles. Administrative structures must have some meaningful impact on the college's ability to be efficiently managed. Some colleges will have management structures that allow them to most efficiently achieve their missions. To the extent that the management structures can influence the application of scientific management techniques/practices in the small, private, church-related colleges, this study would be beneficial.

APPENDIX A

BUSINESS OFFICE

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TOMLINSON COLLEGE

POB 1419, Cleveland, TN 37311 (615) 479 8511 Ext 345

December 3, 1979

Dear College Executive:

As a doctoral candidate and as one daily engaged in the task of college management, I am concerned both with the continued development of useful management ideas, and also a more efficient dissemination of this management information to our profession in a timely and usable fashion.

This study I am conducting will help to determine the nature and extent of the use of certain management practices and techniques in this state. It will also result in a sharing of ideas and information on systems and practices being very successfully and advantageously used in institutions just like ours. This correspondence is being forwarded to you because it is felt you would have an intimate knowledge of all of the phases, systems, and practices in use in your institution.

Will you take just a few minutes of your valuable time to complete the brief checklist/questionaire enclosed. A stamped, self-addressed envelope is being enclosed for your convenience. Anonymity will be granted to all institutions, except upon receipt of explicit permission to cite an institution. This will occur in cases where responses indicate a need for a post-questionaire follow-up, or where responses reveal that an institution is either very representative or clearly exemplary in nature.

A letter of transmittal from my advisor, Dr. Philip Chamberlain, Department of Higher Education, School of Education, Indiana University is printed on the reverse side of this letter. All results from the study will be forwarded to you should you desire it.

Sincerely,

Albert S. Ferguson
Dean of Business Affairs

ASF/tl

QUESTIONAIRE (CHECKLIST)
OF THE
USE OF VARIOUS MANAGEMENT TECHNIQUES/PRACTICES

INSTRUCTIONS:

1. *Please return by December 10th.*
2. *Please respond by checking the box if a particular practice is actually in use in your institution.*
3. *If you checked "no," please describe in the "comments" section any adaptation to the particular item which might be in use; and/or make any other comments you have.*

INSTITUTION TYPE:

Public ☐ Private ☐ Private, church-related ☐

INSTITUTION'S NAME: _____

* * * OPTIONAL * * *

A Management Information System for overall operations
YES ☐ NO ☐
COMMENTS: _____

A Management Information System for planning and/or budgeting and/or accounting
YES ☐ NO ☐
COMMENTS: _____

A formal or informal review of management information systems
YES ☐ NO ☐
COMMENTS: _____

A Linear Responsibility Chart (or Management Responsibility Guide) to delineate responsibility relationships among management staff by divisions
YES ☐ NO ☐
COMMENTS: _____

A Management Audit (at least annually) to assess the state and progress of management education and development
YES ☐ NO ☐
COMMENTS: _____

A Systems Manual, in which the individual functions of each department are flow charted
YES☐ NO☐

COMMENTS: _____

A formal Institutional Development Plan incorporating the institution's mission, and a formal structure for reviewing it at least once a year.
YES☐ NO☐

COMMENTS: _____

An Idea-Lab (a structured top management-supported forum for the interchange and analysis of ideas/innovations)
YES☐ NO☐

COMMENTS: _____

A formal overall institutional marketing plan, that encompasses all major phases of the institution
YES☐ NO☐

COMMENTS: _____

The college or university's marketing activities placed under a specific person, e.g., on vice-president level, (who is responsible for the planning, implementing, coordinating, and controlling of activities)
YES☐ NO☐

COMMENTS: _____

A Cost Analysis System (to store analytically derived and otherwise obtained, historical cost data, for future decision-making, cost comparisons, projections, etc.)
YES☐ NO☐

COMMENTS: _____

Any type of In-House Management Development and Training Program
YES☐ NO☐

COMMENTS: _____

A periodic procedure for promoting awareness in administrative Time Planning or Time Management
YES☐ NO☐

COMMENTS: _____

A requirement for individual Professional Development Plans for top and middle management
YES☐ NO☐

COMMENTS: _____

A standard model or plan for accomplishing a Team Objective
YES☐ NO☐

COMMENTS: _____

A Motivation Model (or system) to influence and increase employee motivation
YES☐ NO☐

COMMENTS: _____

Interview Guides, (to systematize all new employee interviewing and match new employees to the organization or department.)
YES☐ NO☐

COMMENTS: _____

Organized means for receiving feedback on college operations from the college constituency.

YES☐ NO☐

COMMENTS: _____

Formal Structure for periodically sharing technical information, obtained by various administrative staff in outside seminars
YES☐ NO☐

COMMENTS: _____

Other management practices/techniques which came to mind which your institution is finding useful and successful in performing the management task.

1. _____

2. _____

3. _____

4. _____

I REQUEST A COPY OF THE RESULTS OF YOUR STUDY.
YES☐ NO☐

NAME _____
ADDRESS _____

APPENDIX B

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Roster of all Tennessee Colleges and Universities

INSTITUTION	CONTROL	1979-80 HEAD COUNT
Austin Peay State Univ.	Public	5,096
East TN State Univ.	Public	9,947
Memphis State Univ.	Public	21,191
Middle TN State Univ.	Public	10,316
Tennessee State Univ.	Public	5,396
Tennessee Tech Univ.	Public	7,255
University of TN--Center for Health Sciences	Public	2,131
University of TN at Chattanooga	Public	7,106
University of TN -- Knoxville	Public	29,720
University of TN at Martin	Public	5,125
University of TN at Nashville	Public	5,419
University of TN Space Institute	Public	240
Chattanooga State Technical Institute	Public	4,233
Cleveland State Community College	Public	4,591
Columbia State Community College	Public	2,736
Dyersburg State Community College	Public	1,042
Jackson State Community College	Public	2,528
Motlow State Community College	Public	1,954

INSTITUTION	CONTROL	1979-80 HEAD COUNT
Roane State Community College	Public	3,223
Shelby State Community College	Public	4,955
Volunteer State Community College	Public	2,682
Walters State Community College	Public	3,410
Nashville State Community College	Public	3,908
State Technical Institute --Memphis	Public	5,561
State Technical Institute --Knoxville	Public	1,536
Tri Cities State Technical Institute	Public	1,001
Belmont College	Private	1,313
Bethel College	Private	360
Bryan College	Private	557
Carson-Newman College	Private	1,611
Christian Brothers College	Private	1,126
David Lipscomb College	Private	2,196
Fisk University	Private	1,154
Free Will Baptist College	Private	544
Freed-Hardeman College	Private	1,440
Johnson Bible College	Private	397
King College	Private	321
Knoxville College	Private	731

INSTITUTION	CONTROL	1979-80 HEAD COUNT
Lambuth College	Private	807
Lane College	Private	673
Lee College	Private	1,313
Lemoyne/Owen College	Private	990
Lincoln Memorial Univ.	Private	1,067
Maryville College	Private	631
Meharry Medical College	Private	1,038
Memphis Academy of Arts	Private	217
Milligan College	Private	771
Scarritt College	Private	140
Southern College of Optometry	Private	665
Southern Missionary College	Private	1,850
Southwestern at Memphis	Private	1,026
Steed College	Private	736
Tennessee Wesleyan College	Private	447
Travecca Nazarene College	Private	1,344
Tusculum College	Private	484
Union University	Private	1,217
University of the South	Private	1,100
Vanderbilt University	Private	7,373
Acquinas Jr. College	Private	323

INSTITUTION	CONTROL	1979-80 HEAD COUNT
Cumberland College	Private	456
Hiwasee College	Private	764
Martin College	Private	230
Morristown College	Private	140
John A. Gupton College	Private	60
Emanuel School of Religion	Private	134
Clarksville Baptist	Private	80
Cooper Institute	Private	135
Graham Bible College	Private	104
Highland University	Private	15
Mid America Baptist	Private	247
Tennessee Temple University	Private	4,700
Tomlinson College	Private	273
Tri-State Baptist College	Private	40
Bristol College	Private	300
Draughons College--Memphis	Private	800
Draughons Junior College--Nashville	Private	600
Draughons Junior College--Knoxville	Private	550
Edmondson Junior College--Chattanooga	Private	400
Marshall College of Business	Private	511
McKenzie College	Private	500

INSTITUTION	CONTROL	1979-80 HEAD COUNT
Memphis School of Commerce	Private	300
West Tennessee Business College	Private	400

GLOSSARY

Administering: Used synonomously with "managing"

Managing: The functional task of planning, organizing, staffing, leading, evaluating, and developing

Middle Management: Deans, directors, and high-level officers

Scientific Management: Science, not rule of thumb, harmony, not discord. Cooperation, not individualism. Maximum output, in place of restricted output. The development of each man to his greatest efficiency and prosperity[1]

Small Company: Usually determined by its sales volume, assets, and number of employees. A small company here will basically refer to a retail store with annual sales of $1 million, a wholesaler with annual sales of $5 million, and a manufacturer hiring 250 persons or less[2]

Small, Private Church-Related College: 1978-79 enrollment less than 1,000 FTE students; two- or four-year Bible colleges, theological colleges, and liberal arts colleges of arts and sciences (whose primary function is to offer degree programs in arts and sciences), affiliated with a religious group as reported to HEW and other private agencies[3]

Top Management: In the college, the president, vice presidents, and the executive committee

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[1]Frederick W. Taylor, "The Principles of Scientific Management," Scientific Management (New York: Harper & Row Publishers, 1947), p. 140.

[2]The Fortune Directory of Fortune Magazine, August 14, 1978, p. 184.

[3]U.S. Department of Education, National Center for Educational Statistics, 1978-79 Education Directory: Colleges and Universities (Washington, D.C.: Government Printing Office, 1979), p. 89.

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VITA

Albert Sidney Ferguson is Dean of Business Affairs at Tomlinson College, Cleveland, Tennessee. He has also served as Dean of Admissions and Registrar at the same institution. His background includes undergraduate college instruction in various functional areas of business. In addition, Ferguson has worked for the Government of the Commonwealth of the Bahamas in the establishment of the first college in the country, The College of the Bahamas.

Ferguson is a graduate of the School of Business University of Detroit, with a B.Sc. in Economics, and a graduate of the State University of New York (Albany) Graduate School of Business with an M.B.A. in Finance.

His business and management background and the time spent in small college management have produced an interest in the extent to which scientific management techniques are being employed in small, private church-related colleges.